ARCHAEOLOGY IN NEWFOUNDLAND & LABRADOR 1980

EDITED BY
JANE SPROULL THOMSON
BERNARD RANSOM

ANNUAL REPORT No. 1

HISTORIC RESOURCES DIVISION
DEPARTMENT OF CULTURE, RECREATION & YOUTH
GOVERNMENT OF NEWFOUNDLAND & LABRADOR

85-3590/

ARCHAEOLOGY IN NEWFOUNDLAND & LABRADOR 1980

Annual Report # 1

Edited by: Jane Sproull Thomson
Bernard Ransom

Historic Resources Division
Department of Culture, Recreation & Youth
Government of Newfoundland & Labrador
St. John's, Nfld.
February 1981

Cover photograph courtesy Antonia McGrath: polar bear from Shuldham Island Dorset site (see Thomson, this volume)

TABLE OF CONTENTS

ARCHAEOLOGY IN NEWFOUNDLAND AND LABRADOR 1980 (map).....1

INTRODUCTION.....1

Jane Sproull Thomson

PRELIMINARY ARCHAEOLOGICAL FINDINGS FROM SHULDHAM ISLAND, LABRADOR, 1980.....5

Callum Thomson

SMITHSONIAN ARCHAEOLOGICAL SURVEYS, CENTRAL AND NORTHERN LABRADOR, 1980.....26

William Fitzhugh

IN QUEST OF DORSET SUBSISTENCE STRATEGIES: 1980 EXCAVATIONS AT OKAK-1 AND NO-NAME ISLAND, LABRADOR.....43

Douglas Sutton

MISCELLANEOUS ARCHAEOLOGICAL INVESTIGATIONS ALONG THE NORTH-CENTRAL LABRADOR COAST: 1980.....58

Bryan Hood

ARCHAEOLOGY IN SOUTHERN LABRADOR - 1980.....69

James Tuck

THE EXCAVATION AND SURVEY OF A MID-EIGHTEENTH CENTURY SHIPWRECK AT TRINITY, TRINITY BAY, 1980.....78

Newfoundland Marine Archaeology Society

1980 FIELD REPORT OF FRENCHMAN'S ISLAND PROJECT.....88

Clifford Evans

A PRELIMINARY REPORT ON THE EXCAVATION OF THE L'ANSE A FLAMME SITE (CjAx-1).....95

Gerald Penney

ARCHAEOLOGY IN NEWFOUNDLAND AND LABRADOR, 1980

INTRODUCTION

Jane Sproull Thomson

Provincial Archaeologist

The year 1980 has marked a turning-point for archaeology in Newfoundland and Labrador. Increasing pressures on the environment resulting from oil and gas, hydro-electric and other development will continue to accelerate archaeological activity in the province. This will, in turn, increase the need for an annual publication which will keep those interested in touch with our research.

One of the most important developments this year has taken place in the area of legislation. The enactment of the Environmental Assessment bill in the spring of 1980 will undoubtedly mean a great increase in the number of archaeology contracts available here in the future. In recent years assessment work has been undertaken only for government hydro projects. In future assessment will be required for every major new development in the province. The unavoidable increase in archaeological activity here as a result of the new Act will underline a need for resource planning and management, and current activity at the Historic Resources Division is being directed toward developing guidelines in this area.

Assessment work undertaken in 1980 included the Lower Churchill River area and the region of Cat Arm; both for developments by Newfoundland and Labrador Hydro. Dr. J. Tuck of Memorial University conducted the Lower Churchill survey which yielded no new significant sites. Similar results were obtained by Gerald Penney on a survey of the Cat Arm area.

The year has also seen a growth in scholarly-oriented interest in the province's archaeology. Institutions conducting surveys or excavations here in 1980 included Memorial University, Trent University, the Newfoundland Marine Archaeology Society, Parks Canada and the Smithsonian Institution in addition to the Newfoundland Department of Culture, Recreation & Youth.

Memorial University

James Tuck of the Archaeology Unit continued excavations at the Basque land site at Red Bay, Labrador, as well as conducting surveys in the region. In Northern Labrador Callum Thomson excavated Dorset Eskimo sites on Shuldham Island, and surveyed the outer Saglek Bay area. On the Island Tuck directed Memorial University field school operations at the 19th-20th century O'Brien Farm site in St.John's; Gerald Penney continued excavations at the probable Proto-Beothuck L'Anse à Flamme site as well as surveying points along the south coast; and Clifford Evans began work on Frenchman's Island, a Maritime Archaic-Beothuck-European site. Anna Sawicki undertook excavation of Maritime Archaic and Palaeo-Eskimo sites for Parks Canada at Terra Nova National Park. (This report is to be published shortly by Parks Canada.)

Trent University

Bryan Hood completed work on the Nukasusutok-5 Maritime Archaic as well as Nukasusutok-12 Early Dorset sites and assisted Douglas Sutton at Okak Bay, on the northern Labrador coast.

Smithsonian Institution

The final excavation season for the Torngat Archaeological Project was completed by William Fitzhugh in 1980. Surveys were conducted from Postville north to Nulliak Harbour in northern Labrador. At Nulliak, two Maritime Archaic burials and a habitation structure were uncovered. At Okak Bay, Douglas Sutton undertook studies on Dorset Eskimo subsistence patterns by excavation and analysis of faunal remains.

Newfoundland Marine Archaeology Society

The N.M.A.S. continued excavation of the 18th century shipwreck in Trinity Harbour, under the direction of Dr. Vernon Barber.

Parks Canada

Underwater work continued on the San Juan wreck at Red Bay, Labrador, under the direction of Dr. Robert Grenier. Reports on the progress at Red Bay as well as on the work undertaken by Sawicki at Terra Nova Park will be available shortly from Parks Canada.

Newfoundland Department of Culture, Recreation & Youth

The Historic Resources Division began a new project in 1980 with the aim of identifying and where necessary salvaging remaining Beothuck sites. The four-year Beothuck Project got off to a late start in October with brief surveys in Notre Dame Bay, Badger Bay and on Fogo Island. Preliminary results indicate that members of this culture were not as widely dispersed nor as numerous as popular myth

would indicate. Further surveys planned for 1981 will include Notre Dame Bay, the Exploits River and Red Indian Lake as well as the south coast. Co-investigators for the Project are Dr. Ralph Pastore of Memorial University and the author.

Grants

Grants made by the Historic Resources Division for 1980 comprise:

Clifford Evans (Frenchman's Island)	$ 1975
Bryan Hood (Nukasusutok Island)	950
Gerald Penney (L'Anse à Flamme)	3935
Douglas Sutton (Okak Island)	2175
Callum Thomson (Shuldham Island)	2700
James Tuck (Red Bay)	3500
[Beothuck Project	18,600
In agreement with DREE, Historic Resources provided $2500 of a $25,000 grant for the N.M.A.S. project at Trinity	2500
TOTAL	36335

Torngat Archaeology Project results are now being compiled for publication. In addition, we can expect reports on Red Bay and Terra Nova from Parks Canada in the near future, as well as several graduate papers now in process from Memorial University. Information from these sources should produce valuable material for a projected major summary of human occupancy in Newfoundland and Labrador.

PRELIMINARY ARCHAEOLOGICAL FINDINGS FROM SHULDHAM ISLAND, NORTHERN LABRADOR, 1980

Callum Thomson

Memorial University of Newfoundland

INTRODUCTION

For a period of nine weeks during the summer of 1980 an archaeological project was carried out on Shuldham Island and the outer part of Saglek Bay. The main objectives were as follows:

1. To establish the time period for the Late and Middle Dorset occupation of this region through the typology of house structures and tools, radiocarbon dating and the identification of exotic trade items; to document any possible relationships among Dorset, Thule, Norse, and Point Revenge Indian groups.

2. To investigate the technology involved in and interpret the purpose for an apparently intensive production of soapstone figurines.

3. To document the settlement/subsistence patterns and collect a representative artifact inventory for Late Dorset, a period previously not reported from this area; to relate this pattern and artifact collection to those known elsewhere.

With the help of three field assistants for the summer and three volunteers for the final two weeks, most of the interior of two large stone and sod winter houses was excavated. This provided much of the information required for the above objectives. Some evenings, inclement days and parts of days off were spent surveying for new sites and

excavating the shallow deposits at two Early Dorset sites. A total of 26 new sites were recorded, amounting to 98 features on Shuldham Island and 34 on neighbouring Big Island and adjacent shores of the mainland. Findings from these sites are summarized below.

Shuldham Island lies in the mouth of Saglek Bay, sheltered from the full force of the Labrador Sea by Big Island. A range of 100 m high hills in the centre of the Island effectively protects the numerous sites at the south end of the island from the direct blast of the prevailing northerly winds. Large numbers of above and below ground caches, together with scattered remains of walrus, seal and whale indicate that this has been a rich hunting area. Our own summer observations included high counts of caribou, eider ducks, guillemot, geese and loons; char and sculpin seemed plentiful and salmon were also noted; several sightings were made of Minke whale, seal, fox and otter. Investigations of tidal rock pools showed that shrimp, juvenile fish and shellfish could be collected in worthwhile quantities should the need arise. During August and early September, blueberries and bakeapples abounded. While the sina, running a few miles to the east across the mouth of the bay, would supply most of the winter food needs, it was evident that resources were also plentiful in the summer. The diversity of house types and the scattering of sites all around the island suggest multi-seasonal or even year-round occupation of the island, although not necessarily by the same groups. Most of the Dorset sites were found on terraces and beach ridges between 4 m and 6 m above sea level, overlooking small, sheltered coves with safe approaches for small boats. Fresh water is available all over the island in ponds, streams and snowbanks. Suitable building

materials in the form of boulders, flat slabs and sod are always close at hand.

RESULTS OF FIELDWORK

Shuldham 9 (1dCq-22). Shuldham 9 is located near the southwest corner of the island on a terrace 4 m above sea level. This site was discovered and tested in 1977 by members of the Torngat Archaeological Project (Fitzhugh 1980). It was found to contain Middle and Late Dorset material including three human figurines carved in soapstone. A date of 1200 ±80 B.P. (SI: 3354, Fitzhugh: personal communication)was obtained from a sample of wood charcoal found in association with Middle Dorset artifacts in a house midden. This late date and the apparent abundance of Late Dorset material suggested the presence of a much later Dorset occupation than that reported by James Tuck (Tuck 1975). Two houses were partially excavated by the present investigator.

House 1, at the south end of the terrace, took the form of a deep, subrectangular depression in the turf, with a possible sleeping platform at the side away from the sea. The interior measured approximately 6 m by 4 m. Sixty square metres were excavated to a depth of 30-40 cm, with remains of two overlapping structures being uncovered in the process. The later, and only complete house, measured 3.5 m by 3.0 m inside (Plate 1a). The rear platform was raised 20 cm above the main living floor and was partially paved and built up with hard-packed sand. The living floor was paved with small slabs and contained a lamp or cooking area on either side of the entrance. The entrance passage dropped a further 20 cm below the house floor and led 2 m beyond the house wall. Two grease-stained, notched rocks (Plate 1b), probably Dorset cooking aids as found at Okak 3

(Cox 1978), were located beside the hearth areas. Occassional strips of baleen were found on the floor and in the entrance passage. Late Dorset tools fashioned from Ramah chert and other materials were in abundance in the house and a drilled slate endblade was found on the floor.

While several Dorset traits are discernible including the Ramah chert tools, use of sand in the sleeping area and the notched rocks, Thule or Neo-Eskimo - like attributes were also recorded, notably the drilled slate endblade, raised sleeping platform and depressed entrance passage. Several interpretations are possible and must include a Late Dorset copy of a Thule house with some trade or contact accounting for the slate endblade, a Late Dorset reoccupation of a former Thule house and a Thule house built into an earlier Dorset structure. In the case of the latter, tools may have remained in situ from a former occupation or may have fallen out of wall and roof sods used by the Thule house builders. The paucity of Thule artifacts in the site may be accounted for by acidic soil conditions preventing preservation of organics, and by a short occupation.

Some of the paving stones in this house appear to have been borrowed from an earlier structure which extends 3 m or more east of the later house, ie. closer to the shore. No clear stratigraphy was present but cultural remains from this part of the excavation were from Middle and Late Dorset phases. Continuing analysis of field notes should clarify the stratigraphic and spatial relationships of these artifacts.

Some 2700 artifacts were removed from House 1, with the walls, some balks and the midden area being left intact. Common Late Dorset artifacts included unifacial notched and stemmed flakeknives, flake points, flake scrapers, non-tip fluted triangular points, commonly bifacial with deeply concave bases, broadly notched and stemmed bifacial

diagonal knives, and large parallel-sided endscrapers. These were all made of Ramah chert. Nephrite was used for the large tabular burin-like tools. Rectangular soapstone pot and oval lamp fragments often had red ochre applied (Plate 2).

Diagnostic Middle Dorset artifacts included triangular points, commonly ventrally tip-fluted, unifacial triangular endscrapers, a spatulate, incised and gouged slate blade, small sideblades, tip-fluting spalls, and small rectangular vessels. These classes correspond well with those described from Avayalik 1 (Jordan 1980). Microblades of Ramah chert, quartz crystal and Ryan's quartz, hammerstones, schist grinding pallets, cores, retouched and utlized flakes, wedges, perforators and other unifacial and bifacial points, knives and blades are more difficult to assign.

Tools made from organic substances were not preserved, due to the acidic soil conditions. While food bone was poorly represented, sufficient was collected from which to attempt a seasonality study. Twelve pieces of iron were found at various depths and had the form of rectangular-sided nails, blade-like fragments and beaten pieces resembling projectile points. Some of the unusual or exotic artifacts found include a Ramah chert corner notched, bifacial, triangular point reminiscent of Point Revenge Indian style from the Central coast; pieces of several Maritime Archaic ground slate adzes; a large, polished nephrite tool, measuring 6.5 cm x 5.5 cm 0.5 cm, which would have made a fine planing tool, scraper, or adze; a second drilled, ground slate endblade; several Early Dorset tools; and a box-based, Groswater Dorset-like point base. While trade may account for the presence of the Point Revenge point, it seems likely that this was a

location favoured by many cultural groups, from Maritime Archaic Indian through early Palaeo-Eskimo and all phases of Dorset, to Thule and Norse or Labrador Inuit, to account for the iron.

Several spectacular art pieces were found in the form of soapstone carvings. Three human representations, three polar bears, a human skull, a walrus, half of a miniature mask, a bead, a gaming piece and two eggs are included in the more than thirty objects. Some of these are described in more detail below.

Lithic debitage from House 1 and the other structures excavated is summarized in Table 1.

Table 1. Lithic debitage.

House / Debitage	House 1		Shuldham 9		House 2		Shuldham 6		Shuldham 14	
	N	%	N	%	N	%	N	%	N	%
Ramah chert	10150	79.82	9281	91.15	1747	93.67	2877	97.39		
Soapstone	1970	17.49	549	5.39	8	0.43	7	0.24		
Schist	475	3.73	255	2.50	103	5.52	38	1.29		
Quartz crystal	50	0.39	40	0.39	3	0.16	2	0.07		
Slate	28	0.22	14	0.14	-	-	-	-		
Fine-grained cherts	20	0.16	6	0.06	3	0.16	4	0.14		
Ryan's quartz	14	0.11	33	0.32	-	-	22	0.74		
Quartzite	5	0.04	4	0.04	-	-	4	0.14		
Limestone	2	0.02	-	-	-	-	-	-		
Nephrite	1	0.01	-	-	1	0.05	-	-		
Unidentified	1	0.01	-	-	-	-	-	-		
Totals	12716	100.00	10182	99.99	1865	99.99	2954	100.01		

House 2, 10 m to the north, had a roughly circular form, 5 m in diameter. Forty square metres were excavated, revealing most of the house outline. This proved to include a central passage running perpendicular to the shore paved with massive stone slabs and bordered by rows of blocks set vertically to clearly separate the passage from the two side platforms. A cooking area was located on each platform. The

entrance was not discernible. Time constraints prevented complete excavation of this house: most of the fall rocks, all of the balks and walls were left in place and several square metres at the west side of the house were untouched. Occupancy seems to have been intensive during the Middle Dorset period - the thick black deposit of soil contained 2800 artifacts, many of which were Middle Dorset in type - yet the form of the axial pavement and the presence of some Late Dorset tools suggests that the house was re-built during the Late Dorset period. As in House 1, some Early Dorset pieces were also present.

Raw materials were similar to those used in House 1, although percentages differed considerably among Ramah Chert, soapstone and schist (see Table 1). Artifact classes were similar. Seventeen soapstone carvings were found in this house, the most exciting being a sitting polar bear, an exquisitely carved seashell, a human figurine and a bird's head and neck, perhaps used as a stopper in a skin vessel.

The remainder of the visible structures at Shuldham 9 consisted of five more sod houses, seven tent rings and a dozen caches. These were briefly examined but no excavations were undertaken or collections made. Two other sites on the island, Shuldham 14 and Shuldham 6, were excavated during spare time.

Shuldham 14 (IdCq-35). We decided to excavate this site as it lay on a caribou path which we followed between our camp and Shuldham 9 and was being severely eroded. No structural features were visible on the surface but Ramah chert flakes and microblades were scattered over several square metres. Twelve square metres were

excavated to a depth of 5 cm, with 2954 flakes and 350 artifacts being recovered. No features were revealed and no charcoal samples recovered but tool typology suggested an Early Dorset time period. Microblades formed by far the largest tool class, with tip fluting spalls, utilized flakes, dorsally tip-fluted points, cores and knives being less common, and schist pallets, soapstone vessel fragments, perforators, burin-like tools and scrapers rare. During our last two days on the Island we discovered two moss and sod covered oval tent rings containing Ramah chert debitage, and a caribou blind, 30 m north of this site. These may have been associated with the surface material.

Shuldham 6 (1dCq-19). Shuldham 6 consists of three flat paving structures aligned along the top of a beach ridge 5 m above sea level, 50 m back from the shore, at the southeastern tip of the island. Shallow excavation of 26 m^2 through gravel and sand revealed one and possibly two pavement areas surrounded by hold-down rocks. The clearer structure, to the south, appeared to be aligned northeast-southwest, i.e. perpendicular to the shore, with a central passage surrounded by an oval platform. The structure to the south had few paving slabs in situ and may have been robbed to supply stones for the second platform. From these two areas together a total of 300 artifacts was recovered, plus 1865 flakes. Triangular points with straight bases, stemmed burin-like tools and a bifacially flaked scraper indicate an Early Dorset occupation of this site, although the percentage of microblades (20%) is uncommonly low. A black chert chipped burin suggests an earlier, Pre-Dorset presence. A third platform, 5 m to the north was briefly tested but found to be almost sterile - one tabular, Middle Dorset-like burin-

like tool composing the entire collection. One vertical slab was found in each of the two main structures; if these were hearths no charcoal remained. One small, rectangular soapstone pot preform was located beside one of the vertical slabs.

Each of the sites described above was backfilled before we left the island. The two houses at Shuldham 9 were covered with plastic sheeting before backfilling commenced to facilitate re-opening at some time in the future.

Site surveys. Several very wet days, some evenings and parts of most days off were spent surveying new areas. The greatest concentration of sites was found at the northern tip of Shuldham Island, where seven sites (ldCq-36 to 42) were located. Sixty-nine features found at these sites included one cluster of thirty tent rings, eleven other tent rings, three sod houses, two stone houses, seven hearths, twelve caches, one tent platform, two temporary shelters and a possible grave. With the exception of the platform (ldCq-36) which contained early Pre-Dorset material, and the three Dorset sod houses (ldCq-40), most structures were of Neo-Eskimo affiliation. However, at four of the remaining five sites, Ramah chert flakes and Dorset tools were also collected from the surface indicating that Dorset structures were probably present beneath the sod.

On the northeast side of the island two new sites were found. ldCq-48 is a Neo-Eskimo grave and cache with, thirty metres east, a large rectangular tent ring and eight caches perhaps associated. The caches are strung out along a cobble beach ridge and may have contained meat from a whale as large whale bones are scattered about the beach.

The proximity of the grave to these features conjures up interesting possibilities. IdCq-44 is another Neo-Eskimo grave located 100 m above sea level on top of a pass leading over to the north side of the island. It also has a cache in association. Like the other graves examined on the island, this one has a fine outlook over the sea and was neatly constructed around a roomy chamber.

At the south end of the island three new sites were found. IdCq-32 is a grave structure on a ridge 30 m above sea level, looking over Saglek Bay towards St. John's Harbour. It has one cache and two hearths associated and appears fairly old, as all of the features bore heavy lichen growth. IdCq-34, a little further west, has two tent rings and a cache. These three sites are all of Neo-Eskimo affiliation. This corner of Shuldham Island and the west coast are, on the whole, fairly precipitous and ill-suited for habitation.

Two boat trips were made to survey the west and north sides of Big Island, resulting in the finding of three sites on the west coast and none on the cliff-lined northern coast. All three sites contained Neo-Eskimo and Dorset materials. Sixteen structures were recorded, with IdCq-46, a large collection of recent tent rings underlain by Dorset material, looking the most interesting.

Other surveys were conducted on the south shore of Saglek Bay. Sixteen Neo-Eskimo and Dorset structures were found in three sites around Torr Bay, six Neo-Eskimo features and some probable Dorset material in two sites at St. John's Harbour, and twelve features in five sites around the Saglek Base. Included in these were a soapstone quarry which is either worked out or never did contain much soapstone as little remains today but the odd chunk of low-grade material on the ground and

some serpentine and mica; a caribou drive leading towards a natural trap where a hillside meets a pond and five tent rings are located; and a probable Dorset reduction station littered with large chunks of Ramah chert and quartzite.

During the course of our travels about Shuldham Island and the Bay, no soapstone outcrops were found, although debitage was found on the ground at several locations. It is possible that the quarry at Rose Island (Tuck 1975), ten miles west of Shuldham Island, is the source of the diverse qualities and colours of soapstone found at Shuldham 9. Our one trip to collect samples from the quarry had to be abandoned when fog enveloped all reference points.

SUMMARY AND CONCLUSIONS

While cataloguing of the more than 6500 artifacts is not yet completed, initial laboratory analysis and impressions gathered from fieldwork indicate that the major aims of the 1980 project were accomplished. Sufficient diagnostic tools were recovered from Shuldham 9 to enable placement of the Middle and Late components within the northern Labrador chronology, and may help to bridge the gap between the two, with the aid of radiocarbon dates. Artifacts will be compared with those obtained in the inner part of Saglek Bay by Tuck (1975), on Avayalik Island by members of the Torngat Archaeological Project (Jordan 1980) and at Okak by Cox (1978).

While the later structure within House 1 is possibly a Thule house, the presence of Dorset attributes and paucity of slate debitage and other Thule attributes suggests that other possibilities should not be ruled out, including contact between Thule and Late

Dorset.

The presence of at least one central coast Indian tool could suggest trade or other contact with these southern neighbours, or simply periodical geographic overlap, but adds little in the way of positive proof of contact between Indian and Eskimo.

The finding of more than forty soapstone carvings confirms the belief that there was an intense interest in religious or magical practices among the Dorset people of northern Labrador, as suggested recently by Jordan (1979/80). None of the pieces found were pierced for suspension and none resemble the abstract amulets from Newfoundland described by Harp (1969/70). Most were more suited to being held in the hand, carried in some container or placed upright on a level surface. The adult sitting bear reflects varying moods when viewed from different angles: from the rear it is totally vulnerable and unaware, a position in which the hunter would be surprised and happy, not to mention lucky to see it; from the left it is at bay; from the right loudly bemoaning its fate. The other full bear figure is more cub-like, sitting with its hind legs outstretched and forepaws touching its hind toes, a most playful and childlike position. While the adult bear emanates power and menace, perhaps tinged with despair, this little fellow is a buffoon, with no mystical quality whatever.

The bears, shell, eggs, skull and others are carved with a realism not attributed previously to Dorset artwork. Whoever the artist(s) and whatever the purposes - whether as magic aids, hunting assistants, spirit placaters, or joyous representations of a bountiful Nature - these unique artifacts add to our picture of

the Dorset lifestyle a dimension not represented by more functional tools and house remains.

A high proportion of the artifacts recovered are soapstone lamp and pot fragments, ranging from sherds 20mm. thick to fragile miniature vessels a millimetre or two in thickness. Some retain traces of a red ochre wash and many show marks left by gouging, cutting, smoothing and thinning tools. Some of these may have been made with the nephrite burin-like tools which are common in both houses at Shuldham 9.

Future work

One experimental project to be undertaken will be to determine how the soapstone-working tools were ground and polished to such a high degree. The abundance of schist pallets in the site and the lack of other objects suitable for grinding might indicate that these pallets were used for grinding the burin-like tools.

The collections from the two Early Dorset sites will be analysed and compared in an effort to interpret the different site functions implied by the dissimilar tool inventories.

All of these collections will be compared with others from northern Labrador and elsewhere in the Arctic and subarctic. The faunal remains will be analysed to deduce seasonality. While more work is planned for other structures at Shuldham 9 and around the island, most of the aims of the 1980 project were met; continuing analysis will provide the expected and, most probably, some unexpected results.

Acknowledgements

I would like to express my appreciation for help getting into the

field and while there to Henry and Sue Webb in Nain, the staff of PetroCanada at St. John's, Goose Bay and Saglek, James Tuck and Tom Calon at Memorial University, and Tony Williamson in Goose Bay. Special thanks to William Fitzhugh, Steven Cox, Christopher Nagle and Susan Kaplan at the Smithsonian, Richard Jordan and Colleen Lazenby at Bryn Mawr, and to Jane Sproull Thomson, for help and encouragement at all stages of this research. My thanks to Drs. Fitzhugh and Jordan and to Susan Kaplan for their comments on earlier drafts of this report, and to ETV, Memorial University, for photography.

Funding was gratefully received from the Arctic Institute of North America with the assistance of the Firestone Foundation; the Boreal Institute for Northern Studies; the Historic Resources Division of the Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador who also provided the archaeology permit; the Institute of Social and Economic Research, with special thanks to Shirley Fraize; the Labrador Institute of Northern Studies through a Northern Studies Training Grant. This project would not have been possible without the tremendous support from PetroCanada in terms of space on aircraft and assistance on the ground at the three bases. Finally, my sincere thanks for a job well done under difficult conditions to crew members Krishna Mair, Stephen Mills and Duncan Snowden, and to Torngat Expedition members Rick Donahue, Scott Lehman and Eric Radack.

REFERENCES

COX, Steven L.

1978 Palaeo-Eskimo occupations of the north Labrador coast. Arctic Anthropology 15(2): 96-118.

FITZHUGH, William

1980 Preliminary report on the Torngat Archaeological Project. Arctic 33(3): 585-606.

HARP, Elmer, Jr.

1969/70 Late Dorset Art from Newfoundland. Folk 11-12: 109-124.

JORDAN, Richard H.

1980 Preliminary results from archaeological investigations on Avayalik Island, extreme northern Labrador. Arctic 33(3): 607-627.

1979/80 Dorset art from Labrador. Folk 21-22: 397-418.

TUCK, James A.

1975 Prehistory of Saglek Bay, Labrador: Archaic and Palaeo-Eskimo occupations. National Museum of Man Mercury Series 32.

Plate 1a. Shuldham 9, House 1, showing Late Dorset/Thule house in foreground, with raised sleeping platform, two lamp / cooking areas and entrance passage.

Plate 1b. Detail of right lamp / cooking area in Thule / Late Dorset house; note grease-stained notched rocks.

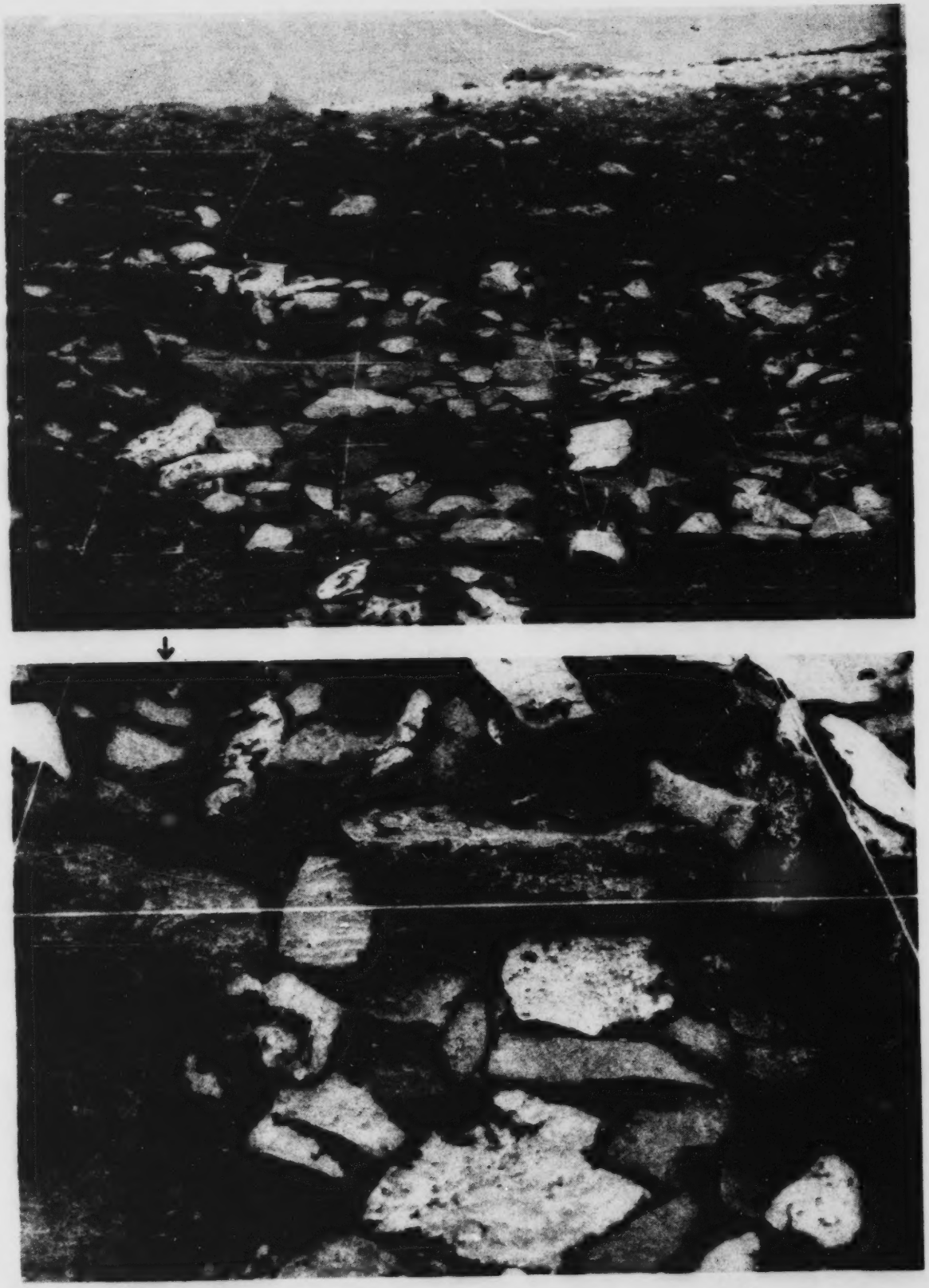


Plate 2. Selected Late Dorset artifacts from Shuldham 9, House 1 (actual size):

a,b,d - triangular bifacial points, Ramah chert
c - triangular biface, Ramah chert
e - stemmed biface, Ramah chert
f - stemmed scraper/graver, Ramah chert
g - adze, nephrite
h,i - bifacial diagonal knives, Ramah chert
j - flake point, Ramah chert
k - flake knife, Ramah chert

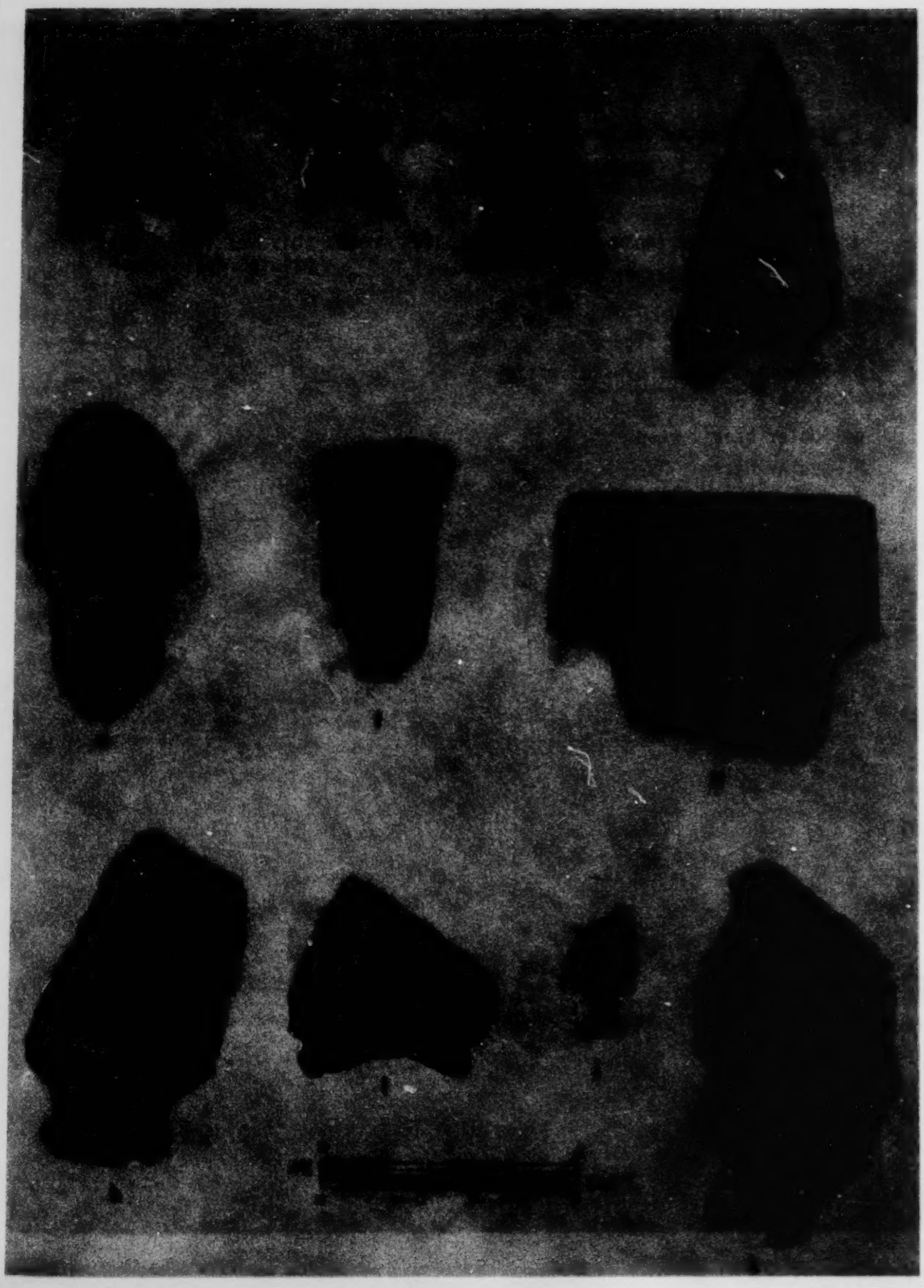
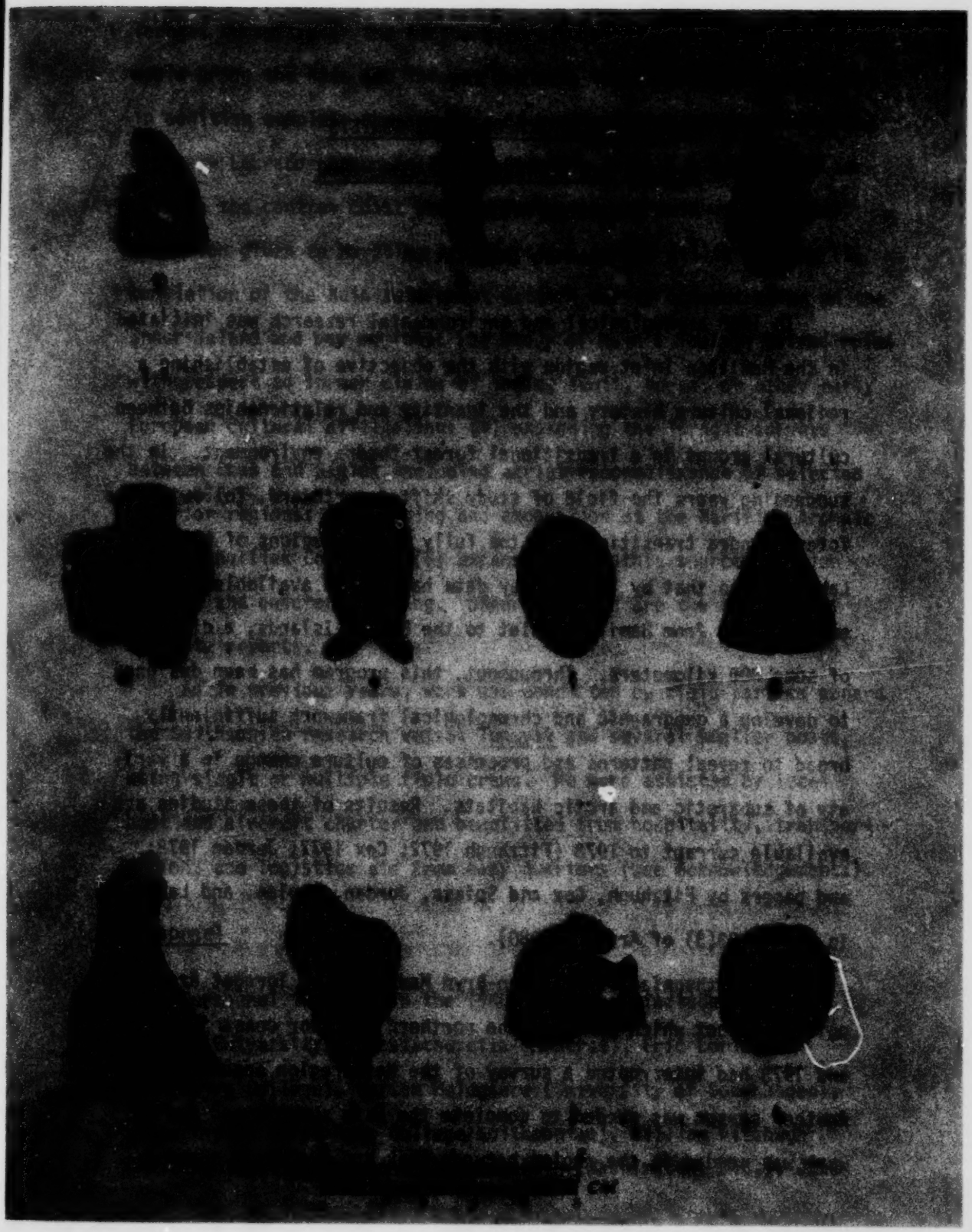


Plate 3. Selected soapstone carvings from Shuldham 9, Houses 1 and 2 (actual size):

a - mask fragment (note tattoo marks) [Ed. note: this was inadvertently printed upside-down]
b - bird's head stopper
c - human figure
d - possible human figure
e - reworked walrus or seal effigy
f - bird's egg
g - polar bear's head
h - polar bear
i - whelk
j - polar bear cub
k - human skull



SMITHSONIAN ARCHEOLOGICAL SURVEYS CENTRAL and NORTHERN LABRADOR, 1980

William Fitzhugh

Smithsonian Institution

In 1968 archeological and environmental research was initiated in the Hamilton Inlet region with the objective of establishing a regional culture history and the identity and relationships between cultural groups in a transitional forest-tundra environment. In the succeeding years the field of study shifted northward, following the forest-tundra transition into the fully arctic regions of northern Labrador, so that by 1978 survey data had become available for the entire coast from Hamilton Inlet to the Button Islands, a distance of some 800 kilometers. Throughout, this program has been designed to develop a geographic and chronological framework sufficiently broad to reveal patterns and processes of culture change in a variety of subarctic and arctic habitats. Results of these studies are available current to 1978 (Fitzhugh 1972; Cox 1977; Jordan 1978; and papers by Fitzhugh, Cox and Spiess, Jordan, Kaplan, and Lasenby in volume 33(3) of Arctic, 1980).

The Smithsonian Institution-Bryn Mawr College Torngat Archeological Project which surveyed the northern Labrador coast in 1977 and 1978 had interrupted a survey of the Nain region begun in 1974. Another season was needed to complete the Nain survey, and further work was needed in the region between Okak and Saglek to augment

Torngat surveys near the northern forest fringe. The 1980 season would bring the Nain and Torngat projects to a conclusion and would in addition complete the sequence of regional studies of central and northern Labrador begun in 1968. Specific goals included: (1) surveys on the central coast between Postville and Nain with special attention given to Maritime Archaic sites in the Aillik region; (2) completion of the Nain settlement pattern survey concentrating on the inner island and bay regions; (3) study of Nain's Sculpin Island ruins with respect to former claims of Thule, Inuit, Norse, or other early European cultural affiliation; (4) expanding the Torngat surveys between Okak and Saglek including aerial reconnaissance of selected interior regions; (5) mapping and excavation at the Maritime Archaic site at Nulliak Cove; and (6) expansion of lithic source location surveys and outcrop sampling. Other projects are the subjects of separate reports.

As in previous years, work was conducted by field parties aboard the Smithsonian research vessel Tunuyak and several smaller boats, using single or multiple field crews. We were assisted by local boat and aircraft charter and benefitted from hospitality, transportation, and logistics aid from many quarters (see Acknowledgements).

Personnel

Personnel involved in the 1980 field work included Stephen Loring (University of Massachusetts--Amherst), Eric Loring (Hampshire College), Morten Meldgaard (University of Copenhagen), Susan Kaplan (Bryn Mawr College/Smithsonian), William Fitzhugh (Smithsonian), Lynne and Joshua Fitzhugh (Washington, D.C.), Jane

Sproull Thomson (Newfoundland Museum), William Ritchie (Nain Craft Center), Douglas Sutton (Smithsonian), and Bryan Hood (Trent university).

Narrative

The season's work began in Postville where the Tunuyak had been laid up since September 1978. Overhaul proceeded slowly due to poor weather, notably an intense easterly storm, more typical of fall than spring, which lasted four days and was considered rather remarkable by local residents. This delayed our progress to the point that Meldgaard and Sutton proceeded north separately on the coastal steamer Bonavista to assist Hood who had arrived in Nain and was about to begin excavations at Nukasusutok. By July 4 work in Postville was complete and Tunuyak departed for outer Kaipokak Bay and Aillik where 1978 surveys had located Maritime Archaic sites on high boulder beaches on the north side of the Aillik peninusula. One of these sites, Aillik West 1, contained several rectangular structures with internal floor subdivisions separated by axial pavements. A Maritime Archaic stemmed point was found in one of these structures.

The 1980 surveys confirmed and strengthened the evidence for large Maritime Archaic sites with rectangular structures, mounds, cache pits and other features on high beaches in the Aillik area. Two new sites were located and mapped, Kaipokak Bay 1 and Aillik 2. The latter was particularly important as it contained seven rectangular structures on beaches 18.5-23.6 meters above sea level, above a beach with Paleo-Eskimo structures at 10.6 meters elevation. The Maritime Archaic structures have the following characteristics: orientation with long axis parallel to the shore; front-to-back width

of about 3.5 meters; weakly delineated cobblestone wall foundations; and external cache pit depressions. Length is the primary attribute that varies from one structure to the next. Structure 7, the highest above sea level, measured 3.5x7 meters and had two room segments. Structure 5 at an intermediate elevation had four room segments and dimensions of 3.5x12 meters. The lowest, Structure 2, had 7 room segments and measured 3.5x26 meters. A Maritime Archaic celt was found in this structure. Unfortunately, the excavation potential and therefore the possibility of direct dating of structures at Aillik 2 is limited by the absence of soil on the boulder and shingle beaches. Nevertheless, this site provides an important key to the relative chronology of Maritime Archaic longhouse development, and it was here that this structure type was first convincingly demonstrated.

Before leaving the Aillik area, a brief, unsuccessful search was made for the remains of the Inuit village and graves that are said to be located in the area of the present-day Aillik fishing village. This site (Aillik 1) has probably been largely destroyed by recent activity, although sub-surface testing might reveal buried deposits. Brief visits made to several other locations in the Aillik region indicated the presence of other sites which should be investigated in the future. The area is particularly important for producing structural evidence since the extensive raised beaches are ideally situated for outer coast sea mammal hunting and summer fishing and are devoid of obscuring sediments and vegtation.

Central Coast Survey: 5-9 July

Enroute north from Aillik, calls were made at Island Harbor in Bay of

Islands, where information on local soapstone quarries and sites was obtained from Leonard and Rupert McNeill, and at Hopedale, where more soapstone data were collected from Ida Millie, Johannes Semiak, and Chesley Flowers. An attempt to re-locate the quarry used by Ms. Millie's father, soapstone carver Nichodemus, proved unsuccessful. A brief survey on the southern end of "Reef Island", seven kilometers northwest of Napakataktalik Island near Hopedale, produced several Groswater Dorset stations, an Inuit sod house, and a shell sample from a beach five meters above present sea level. A visit was also paid to Jim Saunders at the old HBC post site in Davis Inlet, where we were given a sample of "Freestone Harbor" soapstone from the quarry at the northeastern end of Ukasiksalik Island.

Nukasusutok: 10-12 July

Tunuyak joined Bryan Hood's party at Nukasusutok Island on 10 July, rendering assistance at the Early Dorset site at Nukasusutok 12 and expanding previous survey coverage east to Humby Island, located at the winter sina, the land-fast ice edge. Here we found Inuit, Dorset, Pre-Dorset, and Maritime Archaic sites. Similar components were also discovered in the Mount Pickle Harbor area and on an island immediately east of Nukasusutok, temporarily dubbed "No Name Island," which also produced a quartz crystal quarry and two Middle Dorset semi-subterranean houses. One of these houses was tested later in the season by Sutton and Hood. Labrador Eskimo winter villages on the south shores of Niatak and Nukasusutok Islands were examined and mapped. Then both field crews were moved to Nain to prepare for the northern projects. A survey of the outer reaches of Nain and Tikkoatokak Bays

was also conducted at this time. Sutton and Hood departed for Okak via charter aircraft on 17 July.

North Coast Survey: 20-22 July

Jane Sproull Thomson and Lynne Fitzhugh joined Tunuyak in Nain on July 20. An immediate departure was made. That evening we picked up a speedboat cached for us at Kiglapait Harbor by Pitsiulak and proceeded across Okak Bay to Moores Island. Here we searched unsuccessfully for a soapstone quarry previously reported by Steven Cox, and gathered data on Dorset sites containing large amounts of nephrite-like debitage. Nearby, soapstone samples were collected from a previously-known quarry on Coffin Island before we proceeded to Okak Harbor to visit Sutton's and Hood's excavations. A large Neo-Eskimo village was found in the northern part of Napaktak Bay the next day, and on the 23rd, after inspecting the abandoned Moravian Mission station buildings at Hebron, we arrived at Nulliak Cove, 25 kilometers to the north.

Nulliak: 23 July - 9 August

The primary objective of the northern project was to investigate a large Maritime Archaic site discovered by Torngat personnel in June 1978. The site, Nulliak Cove 1, is inside a shallow cove west of Nulliak Island on a high terrace separating a small pond from the shore. Large numbers of Maritime Archaic implements had been found on the blown-out surface of this terrace which was also laced with caribou trails converging from the hills on either side of the pond. The site

had been visited later that summer at which time a number of rectangular structures were noted, in addition to probable burial mounds, caches, and a caribou fence. The complexity of the site, its location north of the forest boundary, proximity to the Ramah Bay chert quarries, and its importance as the northernmost large Rattlers Bight Maritime Archaic component made it important for further investigation.

The 1980 project called for a limited set of objectives. These included surface survey, excavation of selected features and structures, collection of representative tool and charcoal samples, and preparation of a general site map. These were accomplished in the two-mid-summer weeks. Two boulder mounds--one capped with a boulder chamber having a lintel doorway--were excavated and were found to contain burial deposits with large number of lithic tools, red ocher, and mica slabs, but little organic preservation. The caribou fence was partially excavated, as were a number of caches, and a 25-meter segment of one of fifteen recognizeable rectangular structures. This structure consisted of a parallel alignment of low cobblestone wall foundations 3.5-4 meters apart which enclosed an inner space segmented into several 2-3 meter units by hearths and axial pavements. The interior of the structure contained charcoal, fire-cracked rock, Ramah chert and soapstone tools, debitage, and other features. Contrary to expectation, the site produced no evidence of a special function in the exploitation of the Ramah Bay quarries. While most tools were made of Ramah chert, no large amount of debitage or reduction debris was found. Rather, it was in the soapstone industry that evidence of production activity seemed strongest. Large numbers of soapstone plummet blanks and several decorated soapstone artifacts were found.

At Nulliak we were visited daily by scores of caribou, mostly small groups of males, who wandered among us unconcernedly and were easily herded and approached. Hebron is in the centre of the northern Labrador caribou distribution and is an important spring calving area. Caribou were undoubtedly important in the economy of the Nulliak Cove 1 site as shown by its caribou fence containing Maritime Archaic implements. Apparently, caribou hunting at Nullick was important to other cultures as well, for other hunting blinds and fence systems provisionally assigned to Dorset, Thule and Labrador Eskimo were found in the valley to the west of the site. Nulliak area is also an important fall harp seal hunting location.

Our work at Nulliak was punctuated by the arrival of two groups of visitors. H. King Cummings provided Cessna transportation to Saglek and into the forest country west of Okak where a brief survey was made of some of the large lakes which might have attracted certain coastal groups, particularly Maritime Archaic and Pre-Dorset, for fall or winter caribou hunting and fishing. Despite the brevity of these inspections, the absence of prehistoric material was notable. The only cultural activity found was a small camp probably occupied by Naskapi Indians at the east end of West Umiakovik Lake. This gives some support to Moravian records from Okak recounting Inuit nervousness about Indian activity on the near interior in the late 18th and early 19th centuries. Following Cummings' departure, a film crew led by Ted Timrick arrived at Nulliak to gather material for a program on northeastern Maritime Archaic cultures. Timrick's group, and Lynne and Joshua Fitzhugh, were later taken to Saglek in the Tunuyak where they secured a flight to Goose Bay courtesy of Petro-Canada Inc. Jane Sproull

Thomson was shifted to Callum Thomson's project at Shuldham Island at the same time. On the return trip we visited Maidmont Island 4 to map and excavate several "key-hole" structures found in 1977. The cultural identity of this site remains somewhat uncertain, but appears to lie with late prehistoric Point Revenge Indian groups.

Hebron to Okak: 9-10 August

Work at Nulliak was completed on the 8 August, and the next day we began the return trip to Nain. Time did not permit further surveys in Hebron or Napaktok. However, we investigated two lithic resource locations, the first being a soapstone quarry found in 1978 by Peter Johnson at Cape Nuvutannak two kilometers east of Hebron Mission. This quarry contains a high-grade soft soapstone eroding from a declivity in a narrow pass 100 meters long. Historic period pictographs showing ships and boats, a Christian Cross, a British flag, and graffiti are its outstanding features. There is no evidence of prehistoric or historic quarrying. Surveys were also conducted at the east end of Anchorstock Bight and the adjacent interior where, in 1975, Warren Hofstra reported seeing materials resembling Ramah chert. An outcrop of Cod Island chert was found and other samples of various Mugford cherts were collected from the talus, but nothing which could be mistaken for Ramah chert was found, either in the talus or the bedrock geology.

Nain Surveys: 11-28 August

Surveys from 1974-1978 in Nain had concentrated on the outer islands. Comparable information was now needed for the inner islands, runs, and bays so that settlement and subsistence patterns could be reconstructed for the entire area. Our work began in the northern

islands where the possibility of a Thule occupation, unknown south of Hebron, was suggested by sites with rectangular slab-rock walled structures at Sculpin Island. These ruins have in the past been attributed to Norse, Inuit, or other groups, but are similar to ruins found by the Torngat Project in northern Labrador and by other archeologists elsewhere in the Eastern Arctic (e.g. Strong 1929), but they had not been found south of Nain. This site distribution, together with the absence of stone or European implements, suggested precontact Thule penetration into the Nain area even though, as noted above, postive evidence of Thule occupation had not been found south of Hebron.

Our search for a Thule winter village began at Bouverie Island which was reputed to have sites with whalebone and sod houses. Bouverie is on the northern tier of the Nain archipalago near both the sina and the mainland caribou resources, and it would have been here that Thule people moving south of the Kiglapaits would have encountered their first settlement opportunity. Surveys on Bouverie produced Maritime Archaic and Pre-Dorset sites, and in addition, a Neo-Eskimo site with "megalithic-type" rock constructions in the form of tent rings, rectangular structures, caches, and kayak rests bearing similarities to the Sculpin Island structures. Work then shifted to Sculpin Island where two rectangular structures were excavated, producing little except seal bones and a fragmentary ground slate implement. This evidence, and the absence of chert flakes, Dorset tools, or European contact materials, suggested that this site and others on Sculpin, Bouverie, Skull, and

Questlet Islands (described next page) are components of a pre-contact Thule occupation.

We then moved into Kolutalik Bay where data were recovered on Pre-Dorset, Dorset, Maritime Archaic and Labrador Eskimo sites, but evidence of the lost Thule village remained illusory. A Pre-Dorset axial structure was excavated at Quest Cove 1, and two of four Middle Dorset (fall?) houses were excavated on East Questlet. Susan Kaplan directed work at a site found previously by Lynne Fitzhugh in 1978 at St. John's Harbour, south of Black Island, recovering important data from a house apparently occupied by a late Groswater Dorset group undergoing influence from Early Dorset culture.

Surveys between South Aulatsivik and Dog Islands and on Myrtle, Mary, Moskie, Fermoy, Central and Club Islands were not productive except for the location of a small Late Dorset site on Central Island. This site had two small axial pavement structures, each with a single (rather than the usual double) inclined slab hearth feature. One structure was completely excavated and mapped. A few flakes, several Late Dorset tools, and a sample of charred blubber were recovered from a thin cultural deposit. It would appear that this site was occupied for a brief period, perhaps with each house containing only half the normal household contingent. The marginal nature of the settlement may relate to proximity of Point Revenge groups. Surveys east of Central Island resulted in recovery of a tool cache from a rock structure at the Labrador Eskimo site at Parngnertokh in Oakes Bay.

Work south of Dog Island produced new information on settlements in these areas, some of which had been investigated earlier in the summer. Skull Island, which was rich in marine fauna, had a full suite of sites

including several high Maritime Archaic sites (one with three rectangular structures), several Pre-Dorset structures, a large Middle Dorset sod house village, and a probable Thule site with large boulder structures. Farther east, beyond the sina edge at The Clusters, Dorset and Neo-Eskimo sites were found. Similar sites were located at Ford Harbor: Early and Middle Dorset semisubterranean houses, Pre-Dorset floors, and a possible trace of a Saunders component. These surveys essentially replicated the settlement and subistence picture obtained from the Dog and Koliktalik region in previous years, and from Nukasusutok, No Name, and Humby Islands earlier in 1980. Moderate bone preservation was found in an Early Dorset component (possibly a sod house structure) buried beneath a Middle Dorset winter house at Ford Harbor 4. Heretofore, faunal remains have not been found in Early Dorset sites in Labrador, and the only other Early Dorset winter structure known are Iluvektakik-1 in Okak and Komaktorvik-1 in Seven Islands Bay. A small Rattlers Bight Maritime Archaic component was also found at Ford Harbor.

Previous surveys of the east-west runs connecting the inner bays with the outer island zones were expanded to include promising locales at Niatak, Taktok, Bridges Passage, and Harmony Run. Traces of Saunders, Maritime Archaic, Pre-Dorset, and Groswater Dorset activity suggest use of these areas was rather limited until the Labrador Eskimo period. A similar picture emerges from investigation of the wooded inner island runs, bays, and river valleys. Small Pre-Dorset, Saunders, and Point Revenge camps and large numbers of Labrador Eskimo sites were found in these regions, but traces of Maritime Archaic and Dorset groups were few.

The remaining area investigated was Port Manvers Run, the inland passage west of South Aulatsivik whose strong tidal currents, rattles,

and high ground make it the most dramatic geographic feature in Nain. Although earlier work had been done at Village Bay and Thalia Point, Port Manvers Run had never been inspected. Surveys concentrated on promotories in the Run: Fletcher Point, Hare Point, Approach Point, Challenger Cove, and several other locations. Labrador Eskimo camps were found in most areas and a small Groswater Dorset component at Approach Point. Pre-Dorset sites, however, occurred on virtually every promotory in the northern half of the Run, with each site containing a score of axial structures or find locales with discrete artifact assemblages. As in the bays to the south, Dorset sites were small and occurred sporadically. One of the latter was of special interest for its unusual raw materials and artifacts, including stemmed flakes which have not been found in other Nain area Maritime Archaic sites.

Central Coast Surveys: 28 August-4 September

Departing from Nain on 28 August, we travelled south to Voisey Bay settlement. Most of these camps are still seen today as clearings with small rectangular tent sites containing central hearth places with notched stove supports, low-mounded earth embankments, and a thin scatter of tin cans, fragments of cloth and canvas, wood chips, glass, ceramics and other articles from the not-too-distant past. These sites are known by local residents in Nain to have been used by Naskapi on their seasonal trading visits to the coast. Their location at Voisey Bay settlement and later in Kauk is probably directly attributable to presence of independent trader, Richard White. In addition to these trade camps, we visited a more traditional Naskapi camp location at the entrance to Merryfield Bay which has been used by Naskapi for many years and was in use at the time of our visit. Its many well-delineated campsites

probably span more than a century of settlement.

Proceeding east, an important discovery was made in outer Voisey Bay. Returning to the boat from an unsuccessful survey of the central beach pass on Iglosiatik Island, we literally fell into a Thule winter village with 15 semi-subterranean sod houses. The site, Iglosiatik Island 1, is located on the front of a prominent terrace looking toward Tunungayualok Island. The houses, none of which are superimposed but are strung out in linear fashion around the edge of the fossil cove, range from small circular or sub-rectangular structures at the western end of the chain to larger rectangular ones at the eastern end. All of the houses have well defined entrance passageways and most have evidence of rear sleeping platforms. Rock lintel doorways are found in several houses. Midden deposits are not immediately apparent from vegetation patterns. Test pits in several of the houses and middens had a consistent pattern, showing an absence of preserved bone and permafrost, and presence of slab rock floors, wood timbers, flakes of ground slate, mica, a slate bladder float plug, and in House 11- one of the large rectangular structures- a polished slate or nephrite adze or pick. No European materials were found. A quick search for graves or other surface structures was unsuccessful. It seems likely that the unsurveyed eastern end of Iglosiatik and outlying islands will have seasonal sites relating to this large winter village.

Travelling south, we visited Multa Island and continued our early season search for Nichodemus' "lost" soapstone quarry, but without success. However, we were able to locate and sample the outcrop on the southwestern shore of Bay of Islands. As at Nuvutannak, there was no obvious sign of quarrying. Soapstone seems to have been

obtained by collecting naturally fractured blocks.

The final project of the season involved mapping and photography of the large Maritime Archaic longhouse structure at Aillik 2. With this completed we steamed up Kaipokak Bay to Postville, and on 5 September the Tunuyak was driven onto the beach, hauled out, and blocked for the winter.

SUMMARY

The 1980 season added substantially to existing information from the central and northern Labrador coast. A number of long-standing problems have been clarified, and some major new discoveries have been made. The more important results are briefly discussed by culture group below.

Maritime Archaic

The break-through in Maritime Archaic settlement studies perceived first in 1978 at Aillik became a reality with new data from Aillik 2 and Nulliak Cove 1. At Aillik there is evidence of a sequence of rectangular dwelling structures spanning the estimated period from ca. 5500-4000 B.P. showing developments in the size of habitation structures through time, with the largest structures in use during the late Maritime Archaic period. These data are augmented from Nulliak, where many long rectangular structures were found at a large and complex site also containing burial mounds, a caribou fence, and a tool inventory resembling Rattlers Bight. Nulliak is located north of the present forest limit, and preliminary inspection of charcoal from its hearths suggests it was north of the forest boundary at the time of occupation. The large number

and size of some of the Nulliak structures, most of which average between 25-45 meters in length (although several approach 100 meters), and the fact that they contain repetitive living floor units with hearths, cross-pavements and domestic debris, provide new insight into the Maritime Archaic culture type and its development through time. We now have an opportunity to investigate Maritime Archaic social organization with settlement data and to consider its relationship to the better-known burial sites from the coastal Northeast.

Other results from Nulliak include data from two burial mounds, one of which contained a copper pendant while the other produced a large assemblage of Ramah chert tools, large mica sheets, and ground celts. This is the largest deposit of lithic implements found in a Labrador Maritime Archaic burial to date. It is interesting that such wealth should be found at what is now the northernmost burial of this culture. Ground slate points frequently found in Maritime contexts further south, are not common in northern Labrador in the late Maritime Archaic. Unfortunately the only organic traces found were fragmentary pieces of a bark-like substance, and one poorly preserved walrus tusk. Despite Nulliak's northerly location there is nothing to suggest that Ramah chert quarry activity or reduction of quarry blanks figured prominently at this site. Its general appearance suggests a stable seasonal settlement of the type found at Rattlers Bight. Certain features such as the burial mounds and boulder pavements which are similar to the Ballybrack burials and other early Maritime Archaic forms suggests that Nulliak may pre-date Rattlers Bight by some centuries.

Paleo-Eskimo

Although Pre-Dorset sites are common in the Hebron and Okak region they were not targeted for research this summer. However, surveys in Nain have provided a small collection from Bouverie Island 3 whose typological affinities to Independence I mark it as a candidate for one of the earliest Paleo-Eskimo sites in Nain, and perhaps in Labrador. In addition, the large number of classic Early Pre-Dorset sites in Port Manvers Run not only greatly increases our tool collection for this period but their placement suggests that harp seal and caribou hunting were important fall season activities. Settlement pattern data for Nain now suggest that Pre-Dorset may have had a stronger fall and possibly winter inner coastal focus than preceeding Maritime Archaic groups, although sina hunting in the spring was practiced. No late Pre-Dorset sites were found, reinforcing previous data and suggesting that Saunders Indian groups may have restricted Pre-Dorset southern movements at this time.

The most important results in the Groswater Dorset period come from excavations at St. John's Harbor 5. While it would be premature to draw firm conclusions at this point, the collections recovered from this site suggest that the assemblage is atypical for Labrador Groswater Dorset, which is generally a rather stable complex technologically. Standard Groswater Dorset tool types were found, but others were reminiscent of Early Dorset types, as were certain traits like the use of nephrite for burin-like tools. A number of specimens and some debitage made from cherts not found in other Groswater Dorset or Labrador Early Dorset sites appear to have exotic, and probably northern, origins. The site gives every

indication of being a single component. It is the first site found in Labrador to provide information on Groswater Dorset living structures.

The Dorset sequence is quite well known in Nain. New information from this period is mostly in the form of site distributions and settlement patterns. Our inventory of Middle Dorset winter sites has grown substantially, with most sites concentrated between the eastern ends of the large inner islands and the next island tier seaward. Settlements are small, generally with two structures at each site. Data for the Early Dorset period are more limited, suggesting a brief tenure but with patterns similar to Middle Dorset. The single Late Dorset site on Central Island and a possible site at Kiuvik Island near Kamarsuk extends this phase south of its previously known limit in Okak, but only in the form of a brief and probably marginal colonization effort. In terms of general settlement patterns the near-complete absence of Dorset sites from the inner runs and bays is notable, for it contrasts sharply with Pre-Dorset, Neo-Eskimo, and to a lesser extent with Maritime Archaic. Clearly the Dorset culture in Nain had a strong orientation to the outer coast and made little use of the inner coast and near interior.

Later Indian Cultures

New information has been secured on Saunders and Point Revenge occupations in Nain and northern regions. These data refine settlemeet and subsistence reconstructions for these cultures in Nain. To the north, increasing evidence for a Point Revenge or other prehistoric Indian presence between Okak and Ramah Bay raises questions about relationships with Late Dorset groups resident here at the same time.

Archeologically, this is best represented by the manner with which Point Revenge people obtained their chief lithic material, Ramah chert.

The identification of 19th and 20th century Naskapi sites between Nain and Davis Inlet and possibly west of Okak demonstrates considerable potential for archeological and ethno-archeological studies of recent Naskapi culture history in Labrador. Such work, combined with historical, ethnographic, and settlement pattern approaches, would provide information on a dimension of Naskapi culture which is totally lacking today. It would also serve to relate Naskapi settlement on the Labrador coast to its better-known archeological manifestations in northeastern Quebec, and it might also provide linkage with its prehistoric traditions.

Neo-Eskimo

The outstanding result in Neo-Eskimo field work was the location of a large Thule winter settlement at Iglosiatik Island in outer Voisey Bay. This adds further substance to suspicions that the boulder wall structures at Sculpin Island and other sites in the Nain area are in fact related to a Thule period occupation. It seems certain now that a Thule winter village will also be found in the Nain islands. Secondly, the range of house forms at Iglosiatik suggests that the development toward large communal houses in Labrador takes place within a Thule context before intensive interaction with Europeans begins. Whether the changes in house form and therefore social and economic organization, noted here are local or reflect Neo-Eskimo developments farther north is not clear. In addition, the Nain surveys have added to our understanding of settlement pattern shifts and changes in settlement and house forms. Rectangular structures of the Sculpin Island type occur in both Thule and early

contact periods. The identification of these structures, which seem to be succeeded by D-shaped and later large round tents, provides an opportunity to investigate subsistence and settlement shifts and the impact of European contact in the Nain area for the past 400-500 years. One of the many outstanding problems during this period is whether more than one cultural movement penetrated northern Labrador during the Neo-Eskimo period.

Lithic Resource Studies

1980 fieldwork resulted in the location and sampling of several new lithic source locations. In addition to expanding the samples from previously known soapstone outcrops at Coffin Island and Cape Nuvutannak, new sources were found in Bay of Islands, and a sample from the "lost" Nichodemus quarry near Napatalik was obtained. In Nain we found a quartz crystal quarry on No Name Island. Work in Anchorstock Bay discounted the possibility that Ramah chert outcrops in the Mugford group, or anywhere south of Saglek, and expanded our sample of other cherts from the Mugford region. A small chert lens found at Kaipokak Bay 2 suggests that larger chert outcrops may exist in this area. Finally, the considerable amount of nephrite debitage at Moores Island 1 in Okak signals the presence of a nearby source of this material. Moores Island is also thought to have a soapstone quarry, although it has not been specifically identified.

Conclusion

In concluding this summary of 1980 fieldwork it is pertinent to note that the results described above are tentative and derive from field observations which sometimes bear little resemblance to

more considered conclusions. Irrespective of the many specific advances made, these results add considerable depth to earlier investigations in central and northern Labrador and in some cases constitute break-throughs of great importance with impact beyond Labrador to the greater Northeast. The cumulative effects of a long-term regionally-defined field program in which goals and methods have developed over the course of the past twelve years has had a rich return. The 1980 season stands as one of the most productive in the series.

ACKNOWLEDGEMENTS

The field work reported here was made possible by grants from the Scholarly Studies Program of the Smithsonian Institution and assistance of various kinds from the Newfoundland Museum and the Ministry of Culture of the Government of Newfoundland and Labrador. In addition, I would like to express my appreciation to Jack and Norma Lane, Max Tiller, Ross Fudge, Edward Sheppard, Clifford Jacques, and George Sheppard in Postville; to Hayward and Sis Haynes, Henry and Susan Webb, and to William Ritchie of Nain. Brian Garbett of Petro-Canada, Inc. was instrumental in rendering assistance at Saglek. We benefitted greatly from hospitality and aid of various sorts from the Moravian Church in Nain, the International Grenfell Mission in Postville and Nain, the Levi Davis, the Pitsiulak, the Nain Craft Center, the Postville and Nain Town councils, the Labrador Inuit Association, and many others. Above all, to my crew I extend a thankful "well done."

REFERENCES

Cox, Steven

1977 Prehistoric settlement and culture change at Okak, Labrador. PhD. dissertation, Department of Anthropology, Harvard University. Cambridge.

Fitzhugh, William

1972 Environmental archeology and cultural systems in Hamilton Inlet, Labrador. Smithsonian Contributions to Anthropology 16. Smithsonian Institution. Washington, D.C.

Jordan, Richard (editor)

1978 Selected papers from a symposium on Central Labrador archeology. Arctic Anthropology 15(2):1-205.

Strong, William Duncan

1929 Report to the Director. Annual Report for 1928 7(3): 417-423. Field Museum of Natural History Publication 256. Chicago.

IN QUEST OF DORSET SUBSISTENCE STRATEGIES: 1980 EXCAVATIONS AT OKAK-1 AND NO-NAME ISLAND, LABRADOR

BY:

Douglas Sutton, Smithsonian Institution
Bryan Hood, Trent University
William Fitzhugh, Smithsonian Institution

Remarkably little is known of Dorset culture subsistence economics despite the large number of Dorset sites that have been excavated in the Eastern Arctic. Recently, Dorset faunal remains have been reported from Koliktalik, Avayalik, Nunaingok, and Akulialuk in the northern Labrador-Quebec and Killinek regions (Spiess 1978; Cox and Spiess 1980; Julien 1979). These collections come from sites that are widely separate geographically, have variable degrees of preservation and sampling, and occupy different ecological situations. In an attempt to broaden this coverage of Dorset economics, a project was planned to search for Dorset organic-bearing deposits at the large site of Kivalekh (Okak-1) in Okak Bay. Whereas other Dorset faunal samples have generally come from outer locations near the sina, Okak-1, which was known to have Dorset components buried beneath Labrador Eskimo deposits, is in an intermediate, mid-bay resource zone that might be expected to reflect a wider variety of faunal materials, perhaps including caribou which have been notably absent from some Dorset faunal collections, especially Koliktalik. This project was therefore undertaken as an exploratory venture toward these goals and to better document the large Okak-1 site. This work, accomplished in late July, was followed by excavations at No-Name Island, a small outer

island southeast of Nain, where a pair of Middle Dorset semi-subterranean houses with organic preservation had been discovered early in the 1980 field season. These projects were conducted under the direction of the senior author assisted by Bryan Hood.

Departure for Okak from Nain was July 17. We deplaned at Okak Harbour and established a camp near the ruins of the old Moravian mission, abandoned in 1919.

The Okak Project

The archaeological site, Okak-1 (HjCl-1), more commonly known as Kivalekh, contains at least 49 semi-subterranean sod houses and is located on a small east-facing cove one kilometer north of Okak Harbour. Kivalekh was occupied by about 120 Inuit living in 6 houses at the time the Moravian missionaries established their first station in Okak in 1773. Today, the site is abandoned, but it once was a large and thriving village whose economy was, until well into the 19th Century, at least in part dependent on the hunting of large whales. Information on historical settlement here has been compiled from Moravian records and other accounts (Taylor 1974; Taylor and Taylor 1977). Archaeological data on Okak-1 has come from exploratory surveys made in 1966 by Garth Taylor (n.d.) and in 1974 by Steven Cox (1977: 178-184). Cox made the first sketch map of the site and excavated a few test pits in middens which produced predominantly Labrador Eskimo artifacts and refuse. Among these was the first documented example of a brown bear (arctic grizzly) from the Labrador-Quebec peninsula (Spiess, and Cox 1976). In addition, Cox noted the presence of Dorset implements mixed with and sometimes

under Labrador Eskimo middens. However, both Taylor and Cox were able to sample only a few locations at this very large site. Consequently, many questions about its history remained unanswered. One of the more important problems in Labrador prehistory is whether or not Thule culture distribution extended south of its limit known in 1978 in Hebron. The presence of certain sites, like Sculpin Island in Nain, and the historically known potential for Okak as a whaling location, suggested that Thule culture might very likely be present in Okak, and quite possibly at Okak-1. A second area of interest related to the Dorset occupations at the site. The wet marshy soils of Okak-1 in addition to the protection offered by overlying Labrador Eskimo or Thule permafrost middens, might be expected to have preserved Dorset ogranic deposits. If such deposits could be found, they would add greatly to our information on Dorset culture subsistence strategies.

Our investigation of Okak-1 in 1980 was directed primarily at the Dorset subsistence problem. Our objective was to sample the entire site as thoroughly as time would permit and to locate, if possible, areas most likely to produce Dorset deposits with faunal preservation. Optimistically, we proceeded to test the site widely using a soil auger, with cutting bits and hammer. Unfortunately, this technique proved useless against the resistant permafrost, and the task had to be conducted by traditional shovel and trowel testing. Of the many 50 X 50cm test pits excavated , Dorset materials were found in eight, as follows: TP - 1 and 2 contained ground slate and schist slabs, TP-3 (in Structure 28) produced a Groswater Dorset celt but no other

Paleo-Eskimo remains, TP-4 a side-notched biface, soapstone vessel sherds and burnt blubber, and TP-6 (also in Structure 28) a single patinated clear glass bead of a type not previously found in Labrador Eskimo sites (S. Kaplan, pers. comm.). From TP-9 (Structure 30) we recovered soapstone lamp fragments, a single piece of calcined bone, fragmented bifaces, tip flutes, an endscraper and a slate endplane ; in TP-10 a small green chert endscraper with graving spurs and a Ramah chert sidescraper; in TP-11 a large side-notched biface, a small double-notched biface base, nephrite and blubber; and in TP-12 a tip flute, triangular endblade and a miniature triangular endblade. Most of these specimens, and the raw materials used, suggest Middle Dorset period occupations, although in two instances, TP-3 and 10, Groswater Dorset traces are noted. The prevalence of Dorset materials in these test pits suggest a fairly widespread and large Dorset component at Okak-1.

Despite the widespread occurrence of Dorset lithics, the testing program did not produce any indication of Dorset organic deposits. In an effort to penetrate to deeper levels in areas where Dorset material was concentrated, three larger units (2 X 2 m) were excavated in the northeastern part of the site in the vicinity of Cox's House D. The Area A excavation produced abundant Middle/Late Dorset artifacts including triangular points, tip-fluted points, end and sidescrapers, ground and notched nephrite burin-like tools and celt preforms, microblades, endplanes, side-notched bifaces, schist whetstone fragments, and soapstone lamp sherds. Most of the specimens were typical Middle

Dorset implements like those found at Koliktalik, but a few burin-like tool fragments and deeply concave based triangular points suggest transitional or Late Dorset affiliation. Microblades were rare throughout. Excavations in Areas B and C essentially replicated this situation. Most tools were Middle Dorset types, but a few endblades and miniature soapstone lamps suggested later Dorset periods. Whether this results from multiple components or a single transtional occupation could not be determined stratigraphically. Traces of Groswater Dorset and Pre-Dorset components were noted in Area C, Squares 1 and 3.

The Okak-1 tests fulfilled part of our objectives in providing a broader sampling of this large and important site, and resulted in evidence for a considerable Middle/Late Dorset component in the northeastern section of the beach. In some areas, the Dorset deposits have been disturbed by Labrador Eskimo house excavations. Unfortunately, none of the locations tested produced Dorset organics. Attempts to penetrate to Dorset deposits underlying thick Labrador Eskimo middens (and therefore potentially being either frozen themselves or at least better protected during the last few centuries) were equally unrewarding. In the cases where penetration was achieved, bone-less Dorset deposits were found. Presumably, the thousand or so years of exposure before these levels were buried by Neo-Eskimo deposits had taken their toll. Although discouraging, these efforts cannot be taken as definitive for the entire site. Many areas could not be tested, among them some where permafrost is more extensive and test pits could not be prosecuted in the time available. Nonetheless, it does not appear that recovery of Dorset subsistence data will be easily won from this site.

The question of Thule occupations at Okak-1 remains unresolved. No evidence of Prehistoric Neo-Eskimo was found in our test pits. However, given the large size of the site and the many structures that remain to be sampled, it would not be unreasonable to find a Thule component here. The recent verification of Nain's Sculpin Island East 1 (HaCh-6) as a Thule site and location of a major Thule village at Iglosiatik Island (HbCh-1) in outer Voisey Bay makes it certain that Thule sites will eventually be located in Okak.

In addition to work at Okak-1, a small excavation was made at Okak-2, another site previously found and tested by Cox (1977: 184; 1978) on the west side of the Okak-1 beach crest. This site had produced both Pre-Dorset and Maritime Archaic implements with two radiocarbon dates on the latter occupation of 4765 + 85 B.P. (SI-2504) and 4905 + 80 B.P. (SI-2505). At the time, these dates seemed too early, given strong resemblances in certain tool classes (slate bayonets, stemmed points, and soapstone plumets) to Rattlers Bight implements which were dated about one thousand years later. However, recent excavations by Bryan Hood at Nukasusutok-5 in Nain, and the continued absence of Sandy Cove complexes in northern Labrador, suggest that these dates may well be accurate and that a longer tenure for these tool types exists in northern Labrador. 1980 excavations did not produce new Maritime Archaic materials or charcoal, but did result in Pre-Dorset finds: four burin spalls, a burin, a uniface, and two serrated-edge endblade fragments.

No-Name Island Project

When it became evident that the likelihood of finding preserved Dorset bone was minimal, we decided to leave Okak and return to Nain.

We left Nain by boat on August 5, heading east of Nukasusutok Island towards a small islet, temporarily dubbed "No-Name Island", upon which we had found a pair of Middle Dorset semi-subterranean houses early in July (Fitzhugh, this volume). For part of our sojourn on "No-Name", our crew included three British visitors: Allan Goodfellow, Steven Lawrence and Simon Ogden.

Excavations at NNI-2 (Hc Cg-2) were limited primarily to the midden in front of House 1 where, earlier in the summer, seal and walrus bone had been recovered in association with Middle Dorset artifacts. Several square metres of this midden were exposed and excavated to sterile sub-soil. The result was a substantial collection of Dorset lithics, most of which compares favourably with collections from Koliktalik (Cox 1978) and Okak-1. Unfortunately, hopes for well-preserved faunal remains from NNI-2 were frustrated by thin deposits and rather spotty preservation. Painstaking excavation and bone treatment produced a sample of bones which can be used for general comparisons with Koliktalik, Avayalik, Nunaingok, and Akulialik, but it does not appear that all species or elements are reliably represented. Nevertheless, the presence of a cache of walrus mandibles in the midden and generally higher representation of this species distinguishes the NNI-2 sample from that at Koliktalik 1, previously reported by Spiess (1978). The greatest value of the NNI-2 collection is likely to be in demonstrating micro-regional variation in Dorset assemplages and subsistence strategies between two sites (Koliktalik and NNI-2) occupied at about the same period in similar but slightly different ecological circumstances.

Additionally, NNI-2 lithic materials, especially its nephrite and soapstone tools, should prove important in studying Dorset raw materials movement and distributions. Finally, as the second largest collection from an excavated Middle Dorset site in the Nain area, NNI-2 should contribute to a better understanding of Dorset subsistence and settlement patterns in the Nain region.

Conclusion

Excavations at OKak-1 and No-Name Island-2 in 1980 produced important new information on Dorset sites in these areas. The absence of faunal remains from Okak-1 resulted in a shift of field location to No-Name Island, where a considerable collection of Dorset lithic and faunal remains was obtained from a midden in front of a Middle Dorset period semi-subterranean structure located near the sina edge southeast of Nain. Despite rather poor preservation, which included few recoveries of bone or ivory artifacts, a reasonably large sample of food remains was recovered which can be compared with the faunal assemblage and tool frequency patterns at Koliktalik-1, in a similar ecological setting fifteen kilometres to the north. Additionally, excavations at Okak-1 and NNI-2 contributed valuable collections of Dorset lithics to be incorporated into the regional study of raw materials movement which promises to enhance understanding of Dorset culture economic and social patterns.

Acknowledgements

This project was financially supported by the Newfoundland Department of Culture, Recreation and Youth, and the Smithsonian Institution. Dr. William Fitzhugh assisted with field logistics and provided overall guidance; Morten Meldgaard assisted with field preservation of organics. Thanks must also be expressed to Adam Okkuatsiujoak for his assistance during cur stay a Okak, and to Henry and Sue Webb for helping with boat transportation and for providing accommodation in Nain.

BIBLIOGRAPHY

COX, Steven

1977 Prehistoric settlement and culture change at Okak, Labrador. PhD. dissertation, Department of Anthropology, Harvard University, Cambridge, Massachusetts.

1978 Palaeo-Eskimo occupations of the North Labrador coast. Arctic Anthropology 15 (2): 96-118.

and Arthur SPIESS

1978 Dorset settlement and subsistence in northern Labrador. Arctic 33 (3): 659-669.

JULIEN, Michele

1979 Analyse preliminaire du materiel osseux provenant du site Nunainguq 1 (KIL. 3-A) saison 1978. Annex III, p. 1-5. Report of the Nunainguq Mission 78 (KIL. 3)- JcDe-1, by Henry Stewart, Laboratoire d'Archeologie de l'UQAM, Mission Nunaingoq.

SPIESS, Arthur

1978 Zooarchaeological evidence bearing on the Nain area Middle Dorset subsistence-settlement cycle. Arctic Anthropology 15 (2): 48-60.

and Steven COX

1976 Discovery of the skull of a grizzly bear in Labrador. Arctic 29 (4): 194-200.

TAYLOR, J. Garth

1974 Labrador Eskimo settlements of the Early Contact Period. National Museum of Man, Publications in Ethnology, 9. Ottawa.

n.d. Field notes: Site survey in the Nain-Okak area, Northern Labrador, 1966. Archives of the Archaeological Survey of Canada. National Museum of Man. Ms. no. 713, Ottawa.

and Helga R. Taylor

1977 Inuit land use and occupance in the Okak region: 1776-1830. In: Our Footprints are everywhere, Carol Bryce-Bennet (ed.) Labrador Inuit Association, Nain, pp. 59-81.

MISCELLANEOUS ARCHAEOLOGICAL INVESTIGATIONS ALONG THE NORTH-CENTRAL LABRADOR COAST: 1980

Bryan C. Hood

Trent University

This paper summarizes fieldwork conducted by myself, in association with the Smithsonian Institution, in the Nain-Okak region during the summer of 1980. Most of this work was accomplished at the beginning of July on Nukasusutok Island, southeast of Nain, but test pitting and surface collections were done in late July and early August at two sites in Okak as an aside to the research program of Douglas Sutton at Kivalekh (this volume).

Nukasusutok Island

Nukasusutok Island lies 24 km southeast of Nain. In 1979 I conducted excavations at Nukasusutok-5 (HcCh-7), a large Maritime Archaic habitation site, and did limited ground surveys of the central portion of the island. I returned to the island in 1980 to complete the excavations at Nukasusutok-5 and to test Nukasusutok-12 (HcCh-14), an Early Dorset site discovered in 1979.

Nukasusutok-5 (HcCh-7)

Nukasusutok-5 is located on a tombolo beach, 34.2 - 37.5 meters above sea level, near the head of Wyatt Harbour on the south side of the island. Maritime Archaic cultural materials are found *in situ* along most of the terrace. The site was probably reoccupied on several occasions.

Excavations were concentrated in three separate loci: 16 m^2 at the eastern end of the beach (Area 1), 77 m^2 at the center of the beach (Area 2) and 30 m^2 at the southwest corner of the ridge (Area 3).

Area 1 was insufficiently exposed to serve as a meaningful unit for analysis. Area 2 was the most intensively occupied portion of the site. A single habitation structure was uncovered in 1979; this was augmented in 1980 with the exposure of a second dwelling unit. Both structures were oval tent rings, about 3.5 meters in diameter, with entrances opening westward towards external hearth areas. Structure 1 was built around a large flat boulder and contained two internal hearths. Structure 2 was less well defined and encompassed three features: a large box-like domestic hearth and a large, but shallow, charcoal filled pit.

The external hearth areas contained most of the tools and debitage found in Area 2. Among the 290 artifacts were: tapered stem points, a bipoint, a sidenotched point or knife, flake and micropoints, various bifaces, endscrapers, flake knives, celts, slate point fragments, whetstones, a graver, possible linear flakes, "stemmed flakes", hammerstones, schist tablets and high percentages of utilized flakes and pièces esquillées. Debitage raw materials consisted of Ramah chert, 60.0%, quartz, 33.6%, slate, 5.2%, and fine grained Mugford cherts, 1.2%.

Radiocarbon dates from Area 2 are: 5305±175 B.P. (UGa-3160), 5670±175 B.P. (UGa-3161) and 5575±90 B.P. (SI-2526, Fitzhugh 1978:66,77). Charcoal from a test pit towards the western end of the site was dated 4645±65 B.P. (SI-2527, Fitzhugh 1978:66,77). Given the typological data and the range of the dates, 5500 B.P. is a reasonable mean estimate for the Area 2 occupation.

Area 3 contained four features which, in 1979, were thought to be burials. Two of these were thick oval red ochre stains, 1-1.2 meters in diameter, capped with a few cobbles and/or flat slabs. The other two

were clusters of rocks which lacked significant quantities of ochre. Each feature contained charcoal.

Because of the presence of an indurated subsurface soil horizon, in 1979 it was not possible to determine whether or not these features were burials. However, in 1980 the hardpan beneath two features, one with a copious amount of red ochre, the other without, was penetrated with a pick axe. To our chagrin, we reached bedrock without encountering any trace of interments. These features evidently reflect some as yet unknown facet of Maritime Archaic ceremonial life.

The 40 tools collected from Area 3 included: flakes points, bifaces of Ramah chert, an endscraper, a flake knife, a celt, slate point fragments, quartz cores, hammerstones, schist tablets, utilized flakes and pièces esquillees. There are some typological similarities to the habitation site at Area 2 which suggest that these two loci are relatively contemporaneous. Unfortunately, the Area 3 collection is too small to demonstrate this unequivocally. The single radiocarbon date from Area 3, 2770±205 B.P. (UGa-3159), is unacceptably late. Debitage percentages at Area 3 were: quartz, 83.0%, Ramah chert, 15.3%, and slate, ca. 1.7%.

Nukasusutok-5 appears to have been a base camp oriented towards the exploitation of marine resources. Its position near the outer island fringe of the Nain archipelago suggests that the seaward spring migration of harp seals was a major determinant of settlement location.

Nukasusutok-12 (HcCh-14

Nukasusutok-12 is an Early Dorset site located on the western side of the peninsula which forms the western boundary of Wyatt Harbour. Lying about 6.4 meters above sea level, the site consists of at least four axial structures, of which two were completely excavated. It is likely that

additional structures are hidden beneath the beach deposits.

Structure 1 (Figure 1) lay at an oblique angle to the front of the beach and had an axial passage 5 metres in length and 75 cm to 1 metre wide. The passage was constructed of thick flat-topped rocks positioned end to end lengthwise, with large high rocks forming the terminus of each end of the axial alignment. The centre of the passage contained two notched flat slabs (one of schist), which may have been hearth support rocks, as well as a blubber-stained and fire-cracked lamp rock. Peripheral cobbles interpreted as tent hold-down rocks suggest that the structure was 3.5 - 4 metres wide. Three Ramah chert microblades were the only artifacts associated with Structure 1.

Structure 2 (Figure 2) was also oriented at an oblique angle to the front of the beach. It had an axial passage 4 metres in length, about 70 cm wide and was constructed of thick flat slabs laid end to end lengthwise. The passage boundary rocks were displaced at the centre of the structure for a distance of 1.5 metres. The passage contained three separate hearths: one near each end, marked by pairs of notched schist slabs and burned blubber encrustations, and a probably central hearth in the disturbed area, inferred from blubber-encrusted rocks and a single notched schist slab. Peripheral tent hold-down rocks could not be identified with certainty, but judging from the artifact distribution and several putative perimeter rocks, the structure was about 4 metres wide.

Unlike artifact-sterile Structure 1, Structure 2 was associated with 68 artifacts. Of this total, microblades constituted 70.6%, tip-fluted triangular end blades and preforms, 7.4%, tip-fluting spalls 5.9%, soapstone vessel fragments 5.9%, side-notched bifaces 2.9%, miscellaneous bifaces 2.9%,

points on microblades, 1.5%, slate points, 1.5% and utilized flakes 1.5%. Raw materials were almost exclusively of Ramah chert.

A 1 by 1 meter test pit revealed part of the axial passage of a third structure. Artifacts recovered included microblades, a tip-fluted endblade, a tip-fluting spall and schist flakes. The hearth area of a fourth structure was exposed by a 1.5 by 1 meter test pit. Among patches of red ochre and charcoal were microblades, side notched biface bases, a tip-fluting spall, a tip-fluted endblade preform and a nephrite flake. Other test pits and surface collections not associated with structural remains provided further examples of the artifact classes already mentioned and, in addition, two nephrite burin-like tools.

The Nukasusutok-12 assemblage displays characteristics common to Early Dorset on the northern Labrador coast: a high percentage of microblades, tip-fluted (often dorsally) straight based triangular endblades, points on microblades, soapstone vessels with thinned and round lipped rims and the use of red ochre. The burin-like tool which has wide side-notches seems earlier than the other fully ground tabular tool, which resembles Middle Dorset forms. Typologically the assemblage appears to be intermediate between Dog Bight L-3 (dated 2455±75 B.P., SI-2522; 2400±70 B.P. , SI-2153; Cox 1978:99) and the Middle Dorset Koliktalik-1 site (dates ranging from 1900 B.P. to 1300 B.P., Cox 1978:99). Nukasusutok-12 is anticipated to date ca. 2000 B.P., but considering the number of structures present, there may be a fair time depth to the occupation.

Mount Pickle Harbour-1 (HcCh-17

This Early Dorset site, discovered during a Smithsonian boat based survey, is located at the northeastern tip of Nukasusutok Island. Surface collections included microblades, triangular endblades, tip-fluting spalls,

points on microblades, ground schist and nephrite flakes. Structural remains are probably present, but no excavation was attempted to confirm this.

Okak

While assisting with Douglas Sutton's research on the Dorset occupation of Kivalekh, I was able to test two nearby sites which had been investigated previously by Cox (1977).

Okak-2 (HjCl-2)

Okak-2 is a Maritime Archaic site dated at 4905±80 B.P. (SI-2505) and 4765±85 B.P. (SI-2504, Cox 1977, Fitzhugh 1978: 66). Stylistically, however, the point stems, the presence of a soapstone plummet and the high percentage of Ramah chert in the collection, have suggested to some that the site should date later, closer to the Rattlers Bight Complex.

Two test pits were excavated here in 1980 to procure additional charcoal for radiocarbon dating and any new tools which could clarify the chronology. A small charcoal sample was collected, but the only artifacts recovered were a biface fragment and a pièce esquillée.

Okak-4 (HjCl-4)

Three 1 m^2 test pits were placed in in situ portions of this partially blown-out Terminal Pre-Dorset site. The collection of 33 artifacts included: 9 probable proximal fragments of microblades, 3 side-notched point fragments, a single shouldered biface or sideblade, a biface fragment (possibly a side blade), a unifacial micropoint, two crescent shaped sideblades, a chipped and tip-ground burin-graver fragments, a diagonal endscraper and 4 utilized flakes. Raw materials were composed of Ramah, gray banded, gray, blue-gray, gray-green and

green-brown Groswater Dorset cherts. Several flat rock slabs, which may have been part of one or more structures, were exposed in the excavations and in the adjacent blow-out.

Cox (1977, 1978:104) has stressed the transitional Pre-Dorset/ Groswater-Dorset nature of this site. Our 1980 collection supports this; indeed, a plano-convex side-notched point is virtually identical to the "box-based" forms commonly associated with Groswater Dorset.

Acknowledgements

This research was financially supported by the Historic Resources Division of the Newfoundland Dept. of Culture, Recreation and Youth. Assistance with supplies and logistics was generously provided by Dr. William Fitzhugh of the Smithsonian Institution. Thanks must be expressed to those individuals who participated in the fieldwork: Dr. William Fitzhugh, Eric Loring, Stephen Loring, Morten Meldgaard and Dr. Douglas Sutton; and to those Labradorians who aided me in various ways: Adam Okkuatsiujoak, Henry and Sue Webb and Winston White.

REFERENCES

Cox, Steven L.

1977 Prehistoric Settlement and Culture Change at Okak, Labrador. Unpublished Ph.D. Dissertation, Harvard University, Cambridge.

1978 Palaeo-Eskimo Occupations of the North Labrador Coast. Arctic Anthropology 15:96-118.

Fitzhugh, William W.

1978 Maritime Archaic Cultures of the Central and Northern Labrador Coast. Arctic Anthropology 15:61-95.

Figure 1: Nukasusutok-12, Structure 1

Figure 2: Nukasusutok-12, Structure 2

ARCHAEOLOGY IN SOUTHERN LABRADOR - 1980

James A. Tuck

Memorial University of Newfoundland

As in 1979 archaeological research in southern Labrador this year concentrated upon a Spanish Basque whaling station dating from the 16th century. Although traces of Basque occupation have been found at a number of locations between Schooner Cove and Cape Charles, the scene of the most intensive activity seems to have been in the present village of Red Bay and on islands in Red Bay Harbour.

The project is both multidisciplinary and includes the participation of a number of agencies. The work was conducted under permit from Historic Resources Division, Department of Culture, who also provided logistical support at Red Bay. Memorial University, funded by the Social Sciences and Humanities Research Council of Canada, is responsible for archaeology on the land. Parks Canada is conducting underwater research on the galleon San Juan, lost in the winter of 1565 less than 50 metres from the shore stations. The Public Archives of Canada, and particularly Selma Barkham, has conducted documentary research in Spain. The Canadian Conservation Institute, the National Museum of Natural Sciences, Department of Geology at Memorial University, the Canadian Forestry Service, the Department of Fisheries and Oceans and a number of other individuals and institutions have also been involved in the project.

The 1980 investigations were again centered on Saddle Island which protects Red Bay Harbour from southerly winds and makes Red Bay Harbour one of the safest on the southern Labrador coast. Excavations on Saddle Island were centered at six areas. They are:

Area A

This area was the location of a presumed dwelling almost completely excavated during the 1978 and 1979 field seasons. Evidence suggests that structure was walled with a combination of wood and stone and roofed with red tiles typical of 16th century Spain. One wall may have utilized a nearly vertical outcrop of living rock. Two hearths were found within the structure and were completely excavated during the 1980 field season. Bits of carbonized bone, potsherds, nails, and lead fragments (sprue), add to the impressive collection of ceramics (redware and majolica) glass, nails, knives, and other objects including a plane iron, coin, rosary, etc. recovered in 1978 and 1979. Additional excavations on outlying areas in 1980 produced the socket of a harpoon or lance, several nails, other unidentified iron objects, and several large strips of baleen which may somehow have figured in the construction of the structure.

While the area was clearly a dwelling it is difficult to say precisely who might have lived there. Our original impression that persons of status had once dwelt there still seems a reasonable guess but in the light of evidence from Area E (see below) it seems possible that the occupants of Area A could have been coopers engaged in the assembling of barrels to contain oil from the large unexcavated oven immediately below Area A.

Area B

Excavations at Area B were begun with a test trench in 1978 and expanded in 1979. Considerable waterlogged organic material was recovered in 1979 although work in the saturated deposits was suspended to uncover the remains

of a poorly preserved oven unexpectedly encountered after several weeks' work. In 1980 work in water logged (and frozen) areas was resumed and resulted in the recovery of a wealth of wood in an excellent state of preservation. Included among this material are thousands of chips resulting from the squaring or flattening of local spruce, undoubtedly for use in the construction of buildings on Saddle Island. Of even greater interest, however, are a large number of oak and beech barrel parts and refuse from barrel manufacture which suggest the presence of a cooperage very near the wet area where the wood was found. Staves and stave fragments, cants, middle pieces, and center pieces, (including some complete barrel heads), hoops, hoop bindings, bungs and pegs, and numerous pieces of oak and beech scrap (many of which had head pieces sawn from them) all supported the conclusion that a cooperage was nearby. Also of interest were several presumed shallop frame fragments, and other pieces of shaped local and exotic wood.

Area E

This area is located on a small level bench above Area B in a location very similar to that of Area A. A series of trenches was excavated at this location with the position of each tile fragment and other artifact being mapped or recorded. Preliminary indications are of a wood and stone structure, probably not unlike that in Area A. Artifacts also indicate a pattern similar to the glass, ceramics, food refuse, and other objects found at Area A although considerably fewer in absolute numbers. Of special interest, however, was a cooper's adze in a excellent state of preservation, two "head vises" (tools for lifting the last head piece of a barrel into position), a possible hoop driver or a fragment of a

device for forcing the hoops over the top of a barrel, and a large number of chips and fragments of oak and beech, the woods from which all barrels were constructed. The inescapable conclusion is that Area E represents the location of a cooperage where coopers both worked and lived. Its general similarity to the structure and artifact assemblage from Area A further suggests that this previously explored structure may have served a similar purpose.

B and E test trench

To determine the relationship between Areas B (where cooperage refuse was recovered) and E (the presumed location of the cooperage) a one metre wide test trench connecting the two areas was excavated in 1980. The upper part of the trench was immediately below a steep rock face which rises abruptly to the elevation of Area E. Considerable refuse was found in this portion of the trench including not only oak, beech, and hoop fragments, but ceramics, glass, nails, lead, two fishhooks, and a variety of other materials. The lower portion of the trench produced more wood fragments and indicates a continuous distribution of cooperage refuse from the structure to the waterlogged area below. Other artifacts were not as numerous in this portion of the trench although a few bits of ceramic, glass, other objects, and one silver coin (now almost completely altered to silver chloride and as yet unidentified) were recovered.

Area C

This area was the scene of a major effort in 1979 which continued during the 1980 field season. It is the location of a large oven where

blubber was rendered into oil for shipment to Europe. Area C is one of at least seven such ovens on Saddle Island and may be said to be the heart of the whale processing operation. It consists of a long (greater than 10 metres) wall of local and imported (ballast) rocks set in a mortar of grey clay brought from Spain. The wall is more than a metre high in places and averages greater than 60 cm. in thickness. The seaward side of the wall that the cauldrons in which the blubber was rendered were supported. We suspect that short walls at right angles to the main wall were used to support the cauldrons but thus far none has been found, owing, at least in part, to disturbance of this area by heavy seas which tumbled the rocks and deposited beach sand, gravel, and roof tile fragments throughout the disarranged rocks. Further work, however, may clarify this situation.

Excavations on the "inside" of the wall, however, were much more successful. Beneath a thick (up to 50 cm.) layer of crushed roof tile fragments were found the carbonized timbers which supported the roof. Below these, which were not in a particularly good state of preservation, was found a reasonably well preserved series of planks which formed a floor or working platform which at one time may have rested at the level of the wall. Most of these are of local timber but at least two of those exposed to date are of oak and have holes where dowels or treenails were once inserted. We suspect that they are ship planks salvaged for use in construction of the oven. Atop this floor or working platform there were found the remains (staves, head pieces, hoops) of tubs made by sawing whale oil barrels (barricas) in half transversely. They were undoubtedly placed there when the ovens were in use and from descriptions of the Spitsbergen whale

fishery in the early 17th century we are able to reconstruct their function. After the oil was rendered from the blubber it was ladled into tubs half filled with water to cool the oil and to allow the "dross" to settle, thereby purifying the oil, at least to a certain extent. The oil was then ladled into barrels and the bungs driven home, often with a cloth gasket. A considerable amount of textile was also found atop this working platform. It may have been used as gasket material. Comparison with fabric from bungs recovered from the San Juan will take place shortly and should confirm or refute this suggestion.

Other artifacts from Area C are relatively rare and, in addition to nails from the structure itself, include only a few potsherds, some copper fragments which may be bits of cauldrons, and a few leather fragments including one object which appears to be a shoe or pouch. Excavations at Area C are expected to be completed in 1981 and attention will be turned to adjacent structures and areas which may reveal more of the whale processing operation.

Area F

This area was discovered in August 1980. It is located some distance southeast of the previous excavations and is well removed from the harbour in a location quite unlike those areas previously excavated. The thin overburden of crowberries and other vegetation cover was removed to reveal a roughly rectangular roof fall and post moulds and a "drip line" indicating a rectangular building with substantial wooden supports and a tile roof. Time did not permit the removal of the roof fall but a number of artifacts were recovered in

the process of exposing the tile layer. A number of these indicate a 19th or 20th century component but most artifacts, including two harpoon(?) sockets, ceramics, glass, nails and a lead(?) medallion date from the Basque occupation. As yet we have not been able to suggest a function for this structure but may be able to do so when excavations are completed in 1981.

In all, the 1980 excavations at Saddle Island were extremely successful. They resulted in the recovery of approximately 3,500 artifacts but more importantly revealed at least one new activity area (the cooperage and, perhaps, Area F), and added to our understanding of the whale processing as carried out at Area C. It is expected that excavations in future years will continue to add to our understanding of the Basque presence in eastern Canada prior to the year 1600.

Other excavations and surveys

In addition to excavations at Saddle Island surveys and test excavations were conducted in and around Red Bay Harbour and along the coast from Carrol Cove to Chateau Bay. The results of these surveys are recounted briefly below:

Carrol Cove

Roof tile fragments were found along an area roughly 100 metres in length on the south side of Carrol Cove Harbour. No structures are visible on the surface and considerable recent disturbance suggests that excavations may not be repaid. However, the discovery of evidence of Basque occupation increases our knowledge of whaling

station locations and confirms Selma Barkham's hypothesis that Carrol Cove was indeed the location of a shore station.

Western Arm - Red Bay

Several sites were discovered in Western Arm. They include:

A group of sod structures which produced seal bones, ceramics, iron, a gun flint and other material which may date to the late 18th or early 19th century. No identification of the site is yet possible but it might be the location of a French sealing station dating from the 18th century.

A Rattler's Bight period Maritime Archaic site was located in a blowout at the western end of the arm. No material remained in situ and what artifacts were recovered were scattered throughout the basin. The presence of a very high proportion of artifacts (celts, gouges, bifaces, a plummet, a Ramah chert projectile point, etc.) and very few flakes suggests that the site may have been a small burial locus rather than a living site.

Several small concentrations of quartz and quartzite flakes and occasional artifacts suggest the presence of aboriginal people in the Red Bay area during the early/middle Archaic period, probably 6-7,000 years B.P.

Finally, a small concentration of very high quality chert flakes and spalls and a roughly side-notched biface provides something of a puzzle in interpretation. The raw materials are quite unlike the usual quartz, quartzites, and low grade cherts used by other peoples in the Strait of Belle Isle region. The source of the raw materials remains unidentified and the cultural affiliations of the site await the

recovery of additional artifacts and perhaps datable charcoal.

Tracey Beach - Red Bay

Excavations were carried out at Tracey Beach on the west shore of Red Bay Harbour to expose a whale bone deposit. S. Cumbaa, National Museum of Natural Sciences, assisted in the excavations and will analyze the date obtained. The area excavated produced primarily ribs and vertebrae and fragments thereof. At least 32 individual whale skulls were counted elsewhere on the beach. All save one possible bowhead were the skulls of right whales.

Twin Island

Test excavations on this small island east of Saddle Island revealed the rock outline of a small rectangular structure built against a vertical rock face. Against this face is a mound of grey clay identical to that used by Basques in the construction of ovens. A grid has been extended to Twin Island and excavation of this structure will be undertaken when time permits and, hopefully, when the resident goat has been removed to some location where it will be less bothersome.

Chateau Bay

Several areas at Chateau Bay produced concentrations of quartz, quartzite, and, in one instance, Ramah chert. Only one identifiable artifact, a projectile point similar to those from the Arrowhead Mine site (c. 7000 B.P.) was recovered.

THE EXCAVATION AND SURVEY OF A MID-EIGHTEENTH CENTURY SHIPWRECK AT TRINITY, TRINITY BAY, 1980

Newfoundland Marine Archaeology Society

Introduction

The Newfoundland Marine Archaeology Society (NMAS) was formed in 1972, and since that time the group has surveyed and excavated three major underwater sites. The most extensive work has been done on a shipwreck that was found by divers looking for scallops in 1977 in the harbor at Trinity, Trinity Bay. The NMAS made an initial survey of the site in 1977, and in 1978 and 1979 did an extensive excavation and survey of the shipwreck (see references for further details). This work has indicated that the wreck is the remains of a British merchant vessel. The identification of the vessel in uncertain, but a dated seal from 1738 (recovered in 1978), and a medal dated 1757 (retrieved in 1980), plus an evaluation of the artifacts retrieved over the years of work on the site, place the vessel in the middle to late eighteenth century. One possible candidate for the wreck is the Speedwell, lost in the ice at Trinity in 1781 (see references).

The objectives of the 1980 Trinity operation

The NMAS felt it necessary to continue the work at Trinity in 1980, and to this end funding was secured from the Department of Regional Economic Expansion, through the Historic Resources Division of the Newfoundland Department Culture, Recreation and Youth.

The 1980 operation was planned with the assumption that it

would be the last extensive work done by the NMAS on the site for several years. It had already been indicated that no further funding was likely to be forthcoming from D.R.E.E., and future provincial funding for the project also seemed unlikely. However, it had been felt that it would be possible in 1980 to complete the major intentions of the research. Consequently, the following objectives were set:

a. To excavate in 66K(N) and 66J(N) (see Figure 1 for the site plan), so that the second cross-section of the wreck site could be completed. It was particularly hoped that the keel and keelson could be located in these excavated areas.

b. To excavate 72N(N) and to re-excavate 72K(N), 72L(N), and 72M(N), and to re-map these areas. This would complete the picture of how the vessel lay, and would provide additional information on hull construction.

c. As, and if, time allowed, it was intended to excavate inshore of 72K(N).

d. Searches for other wreck sites were to be undertaken along the shore adjacent to the known site.

Organization

In the fall of 1979 a subcommittee of the NMAS was re-convened to prepare a submission for D.R.E.E. funding for the Trinity operation in 1980. The committee was also given the task of all the initial organization of the expedition.

The NMAS again obtained the use of the house and land at Trinity at what is known locally as Bar Point, adjacent to Goose Cove. This provided reasonable accommodation for site workers.

Additional accommodation was provided by personal tents/trailers, or at Dr. Duncan's house.

Three persons were employed by the NMAS to ensure continuity on the site. A project director was employed for a period of six weeks, a cook/photographer/site assistant was employed for five weeks, and a conservator/cataloguer was employed for six weeks full time work, followed by half time employment until the end of 1980. All the personnel were NMAS members and had worked in similar capacities on Society or other marine archaeology projects.

In addition to paid employees, a total of thirty seven volunteers assisted at some time on the site, either as divers,or on the land.

The expedition advance party arrived at Trinity on July 19, 1980. The first five days were spent in setting up the temporary conservation laboratory in the basement of Dr. Duncan's house, getting the accomodation in order, establishing a base on the beach at Admiral's Point, and setting up the baseline, grids, and airlifts on the wreck ready for the start of the first week of the operation.

An Atco trailer, a site hut, and a tent, were set up on the beach adjacent to the wreck site. These were used for the storage of equipment, provided protection for the workers in the unusually wet and cold weather, and were used for briefing sessions, meals, and writing of Diver Report Forms. While boats were available, the inclement weather in 1980 caused them only to be used occasionally, most of the transport of personnel and artifacts being made by road.

All the necessary preparatory work was completed by July 24 in

time for the commencement of the excavation on Friday, July 25. The operation finished on Tuesday, August 19, 1980.

Outline of the main diving operations

A total of 180 person hours were spent underwater in the 1980 work at Trinity. Excavations were carried out at two main locations on the site. The first was in grids 66K(N), 66J(N), and 72N(N), to complete 6 m^2 og excavation. These areas were also fully mapped. The second location was the re-excavation of grids 72K(N), 72L(N), and 72M(N). The latter re-excavation and re-mapping took up an extensive period of the available work time. This limited the new areas that could be excavated. A problem in 66K(N) and 66J(N) was that excavation had to take place actually under the hull in order to reach the keel, and measure and map the outer planking of the hull. Both of these activities were successfully undertaken, but because of the danger of a diver becoming trapped, another diver had to act as safety cover and remain outside the excavation hole.

Due to the shortage of time, only very limited searching was undertaken, although some surface artifacts adjacent to the wreck site were recovered (see later).

One further task undertaken in 1980 was to place the timbers removed from 64L(S), 66N(N), 66M(N), and 66L(S) in 1979, into the excavated areas 66K(N) and 66J(N) .

At the end of the operation, all the excavated and re-excavated holes were filled with sand bags that contained beach gravel. In this process the timbers removed in 1979, and re-buried in 1980, were covered with the filled sacks.

Artifacts

A total of 136 artifacts were recovered in the operation, ninety-one of these being retrieved as a result of excavation, and forty-five being recovered as a result of surface collection on the site, and adjacent to the site.

As in previous years, numerous organic artifacts were recovered, including collections of wood, rope, leather, and bone. The keel was uncovered and a sample was taken for identification. A wooden handle, similar to a tankard handle located in 1979, was discovered. This handle is slightly smaller in comparison to that found previously. A 135 mm long bone handle of the back of a brush was also retrieved. It has a grove in the centre of the end of the handle, and has forty round holes through the back. An almost complete leather shoe was also recovered. A one and a half metre long sample of rope was retrieved for study. The construction of the rope and its size (275 mm circumference) suggests that this could have been part of an anchor rope. A portion of a base or top of a large barrel and two worm-eaten staves were photographed, sketched, and measured, and then returned to the site.

As was found in previous years, the metal artifacts contained a majority of lead items, in the form of lead strips, sheeting, and shot. Two white metal artifacts of note were the round bowl of a spoon and a small portion of its handle, and a part of a buckle. The next metal found in order of quantity was copper. A copper based disk with a raised inscription on both sides was found. The inscription "QUO NIHIL MAJUS", "ROSBACH NOV 5 1757" with a battle scene is on one side. The reverse side is more corroded, but "FREDERICUS----", "LISSA DEC 5", is legible, and a horseman holding

a raised baton can be distinguished. Initial historical research showed that the medal commemorated the Prussian victory at the battles of Rossbach and Leuthen in November and December, 1757, during the Seven Year War. It would probably be of British origin. This artifact was forwarded to the Canadian Conservation Institute for conservation and analysis of the metal. Another copper-based artifact was a button with a broken shank and an abraded design. A buckle was found adjacent to the site in a surface collection.

A small, light green, blown glass/medicine vial was the main find ofr the category of glass/ceramic/earthenware. It is 91 mm in height, has a kick-up of 14.5 mm, and has a flared rim.

All artifacts were transported from Trinity on August 19, 1980, to Room C140, Chemistry/Physics Building, at Memorial University, which has been the NMAS laboratory. Since their return to the laboratory, the artifacts have been completely stabilized. The salts are being removed by regular changes of water and as the process nears completion, the artifacts will be stored in deionized water. Lithothamnion growths have been removed from all artifacts, except for the heavily encrusted earthenwares. All lead artifacts have been conserved, dried, and catalogued. All glass artifacts have been conserved, but several require reconstruction before cataloguing. The majority of ceramics are completed, except for the heavily encrusted samples which have already been mentioned. The conservation of the organic artifacts will take a longer period for completion.

Summary of the Trinity operations 1977 - 1980

The four expeditions to Trinity covering the years 1977 - 1980,

have been financed to a total of $78,000 and have allowed the excavation of 41 m^2 of the wreck site. However, this represents only a fraction of the total area of the shipwreck. Personnel spent approximately four and a half months on site in the four years, and totaled approximately 700 person hours underwater. Over 1,000 artifacts have been retrieved, many of which are items of museological interest. Two of these were dated items, bearing the dates 1738 and 1757.

Three complete cross-sections of the wreck were excavated, and as a result, the location and position of the keel has been determined, and the lie of the vessel has been established. An extensive level of knowledge of the methods used in the construction of the vessel has now been accumulated.

Most of the information on the site has still to be published, but one article, specifically on the Trinity site has been completed (Barber, et al, 1981). Four other articles containing summaries of aspects of the Trinity site have also been completed (Barber, J,M., 1980; Barber, V.C., 1979, 1981; Barber and Emerson, 1979). In addition, accounts of the Trinity wreck site, or lectures containing information on the site, have presented at meetings in Chicago, Edinburgh, Halifax, London (England), Ottawa, Plymouth (England), St.John's, and Windsor (Ontario).

An additional benefit of the work has been the considerable pool of relatively experienced amateur marine archaeologists that has been undertaken at Trinity.

Acknowledgements

This article was produced from information provided by Ms. J.M.

Barber, Dr. V.C. Barber, Ms. D. Brett, and Mr. B. Merdsoy. The specific assistance of Mr. T. Benson, and Dr. P. Duncan with regard to accommodation is gratefully acknowledged.

REFERENCES

Barber, J.M. 1980. "Marine archaeology in Newfoundland - a review". Progress in Underwater Science. Report of the Underwater Association. Vol. 5 (New Series), pp. 71-83. Pentech Press, London.

Barber, J.M., V.C., and Moir, A.J.G. 1981. "Methods used in work on a mid-eighteenth century merchant vessel, sunk at Trinity, Newfoundland". In "Diving Science", The Sixth International Symposium of the World Underwater Federation, Edinburgh. In press.

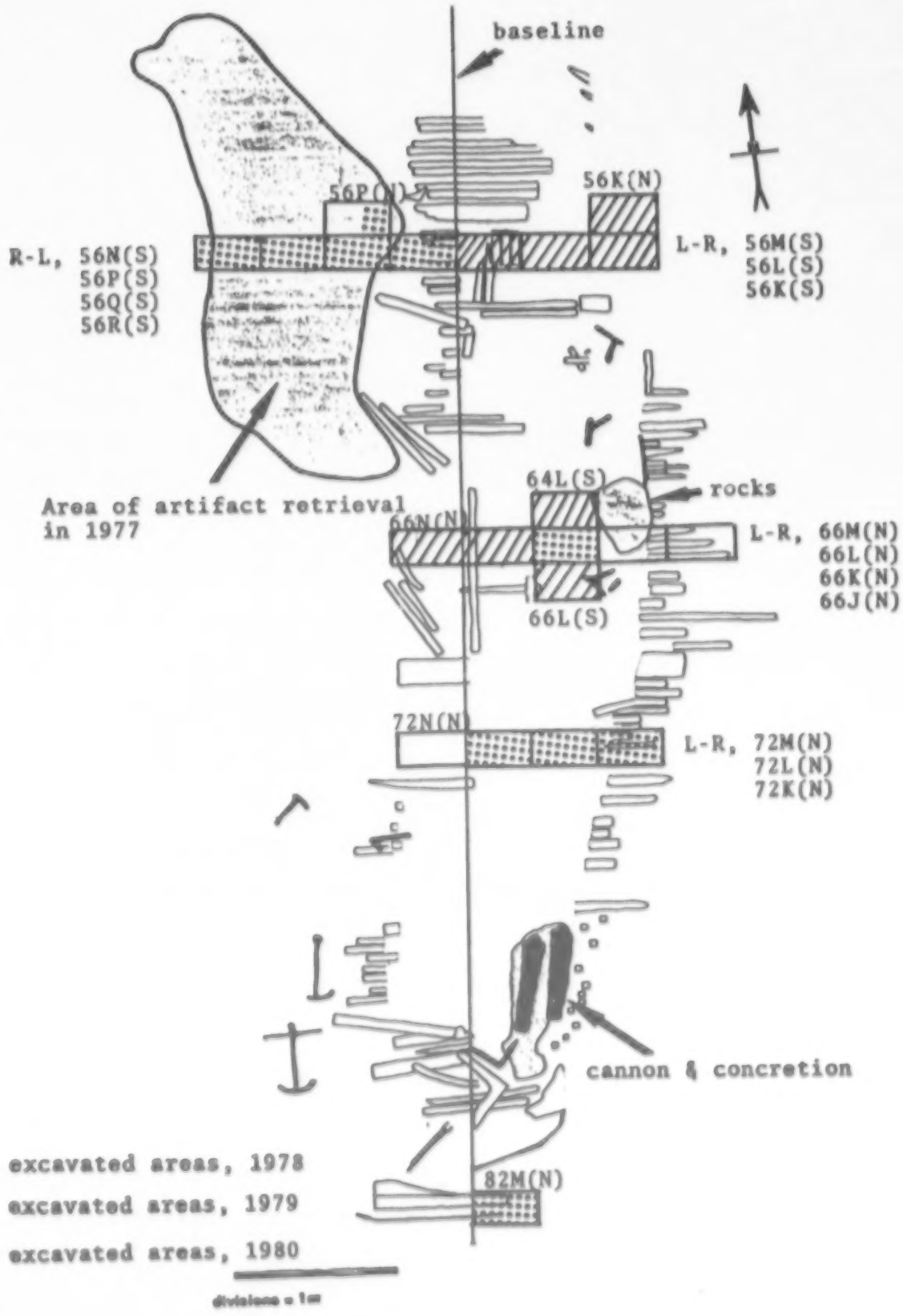
Barber, V.C. 1979. "SEM and X-ray microanalysis of artifacts retrieved from marine archaeological excavation in Newfoundland". Scanning Electron Microscopy/1979/II. pp. 885-891.

Barber, V.C. 1981. "Underwater archaeology in the Atlantic Provinces of Canada". In "The Future of Archaeology in the Maritime Provinces". Occasional Papers, Department of Anthropology, Sr. Mary's University, Halifax. In press.

Barber, V.C. and Emerson, C.J. 1979. "SEM studies of wood retrieved form marine archaeological sites in Newfoundland". Proc. 6th Annual Meeting of the Microscopical Society of Canada, Vancouver. pp. 30-31.

FIGURE 1

Plan of the Trinity site (based on survey work done in 1977), showing areas excavated up to and including 1980.


baseline
56K(N)
56P(N)
R-L, 56N(S)
56P(S)
56Q(S)
56R(S)
L-R, 56M(S)
56L(S)
56K(S)
Area of artifact retrieval
in 1977
64L(S)
rocks
66N(N)
L-R, 66M(N)
66L(N)
66K(N)
66J(N)
66L(S)
72N(N)
L-R, 72M(N)
72L(N)
72K(N)
cannon & concretion
82M(N)
= excavated areas, 1978
= excavated areas, 1979
= excavated areas, 1980
divisions = 1m

1980 FIELD REPORT

of

FRENCHMEN'S ISLAND PROJECT

Clifford O. Evans

Memorial University of Newfoundland

Frenchmen's Island is a small neck of land, 3-4 acres in size, connected by a tombolo beach to the south west side of Sunnyside Harbour. (It cannot be considered a true island because of its connection to the mainland by a 30 metre beach which only at the highest tide is awash). The site is located at the junction of the tombolo beach and the main body of the island.

It was first recorded by G. Penney (1978) while conducting an archaeological survey in the area. At that time insufficient testing made it impossible to assign any cultural provenience, although - based on John Guy's 1612 narrative - it was strongly suspected to be of Beothuck affiliation. Subsequent testing produced more concrete evidence that there had been a Beothuck as well as a Maritime Archaic occupation on the island.

With financial support and an excavation permit from the Historic Resources Division of the Newfoundland Department of Culture and permission from the Town Council of Sunnyside, excavation commenced September 13, 1980. Aided by two field assistants and the students of the M.U.N. Archaeology Field course, an area of roughly 50 square metres was cleared and gridded.

The first area exposed was along an eroding bank where a number of fire-cracked rocks were being washed out by tidal and wave action. These

rocks represented the southern edge of a large feature, (Feature 1), of fire-cracked rocks, bones and a midden of clam shells.

Feature 1 (Contact-Beothuck)

For the first few weeks this feature received major attention because of the wealth of cultural material it contained. It appears to have been an oblong arrangement of fist-size fire-cracked rocks which was 4 to 5 meters by roughly 3 meters. It is difficult to say how much of the original width has been dislodged, but the major proportion seems to have remained intact.

The feature seems to have two aspects. The western half appears to have been a refuse dump for clam shell and animal bones. These remains were present in the eastern section but distribution was not as dense; there the predominant aspect was the fire-cracked rocks. Mixed through this feature was a very black humus-like material which had a texture most like coffee-grounds. This black humus contained not only the feature's rocks and faunal refuse but a wealth of other cultural material, both of native and European origin.

The lithic material consisted largely of triangular bifaces, corner-notched expanding stemmed projectile points and retouched flakes of both European ballast flints and native cherts.

The materials of European origin consisted of iron nails, a small hewing axe, olive green glass, one sherd of wheel thrown earthenware, lead shot, gun flints (French) (Hume 1970, p. 221) and miscellaneous lead and iron pieces. The most interesting occurence was the large number of clay pipe stems. A conservative estimate would range around 500 fragments over half of which seem to have been in a cache. The number of stems recovered

seems strange in view of the scant occurence of clay pipe bowls, which numbered approximately a dozen whole and fragmented.

The preliminary analysis of pipe stems bore diameter using the straight-line regression formula (Ibid.:299) produced an approximate date of the 1650's. This is supported by "maker's marks", bowl form and decorations.

Charcoal was scanty in this feature although a sufficient amount was collected and submitted for radiocarbon assay.

Dorset Component

Immediately beneath "Feature 1" a second stratum, consisting of root-infused beach pebbles, contained evidence of a late Dorset occupation. Over 70 ground and chipped stone artifacts were retrieved from this zone.

The lithic material from Stratum #2 for the most part was badly patinated, white in appearance and chalk-like in texture. Most flake debitage and a good proportion of artifacts were in this condition. The assemblage consisted of quartz crystal micro blades and cores, scrapers, a ground slate knife, burin-like-tools, tip-fluted end blades (most of which were heavily ground), and chipped and ground multiple notched adzes.

Possible Structure

It is often the case that exciting and important discoveries are unearthed on the last few days of excavation. This happened at Frenchmen's Island. While totally excavating Stratum 2 (which was achieved only in a few excavation units) a linear pattern of flat

stones became apparent. This is suspected to belong to some type of Dorset structure. Insufficient time prevented further exposure of this feature, thus little can be said except that adjacent to these stones a good proportion of the domestic Dorset material was retrieved including two adzes and a large slate knife.

The lack of soapstone vessels, the heavy amount of grinding on the tip-fluted end blades and Linnamae's(1975:73) reported late dating Dorset component from the Avalon Peninsula might suggest that this occupation was fairly late, roughly 600-700 A.D. Hopefully this will be confirmed by the carbon sample, collected from this feature and sent for assay.

Pre-Contact Beothuck

The second area concentrated on was further to the east. This section of the site produced a single component prehistoric occupation. The stratigraphy was very different from the area around "Feature I". Here, the peat layer ranged from a few centimeters to nearly 15 cm. deep and over laid the black peat/humus cultural layer. Below this was the sterile gravel till. The cultural layer ranged in thickness from 2-3 cm. to as much as 7 cm. and contained an abundance of lithic debris, triangular bifaces, corner-notched or expanding stemmed projectile points, a flake side scraper and various retouched flakes. The only European material from this area included a gun flint, a piece of iron, lead shot and a clay pipe bowl, all of which were at the interface between the peat and the black culture layer, which might suggest intrusion although this can only be arbitrated by the carbon date. Faunal refuse was recovered in the form of bird bones, clam shells and other undetermined mammal bones.

Even though there was an abundance of cultural material recovered, no structures or hearth features could be recognized. It should be noted that a shortage of time prevented more extensive excavation in this section.

Maritime Archaic

To date, little can be said about the Maritime Archaic occupation beyond noting its presence. Only two artifacts have been retrieved and only one was discovered during this field season, the basal portion of a large lancolate side-notched expanding base biface. Future research may produce a more substantial assemblage.

Other Cultural Material

While test-pitting the north west area of the Island a Palaeo-Eskimo side-notched biface was recovered. Little can be said except that the artifact, stylistically, appears much earlier than the other Palaeo-Eskimo material recovered on the site.

Aside from this there are four mysterious pits and trenches on the northeast corner of the Island overlooking the harbour. These are possibly related to French military activity on the Island during Queen Anne's War (Gordon Handcock: personal communication).

Also on the mainland shore, due west across a small cove from Frenchmen's Island, is an earth-mounded, rectangular-walled structure. Interior dimensions measure 15m by 9m with meter high walls and an entrance which faces southeast towards the shoreline. A number of test pits dug in the interior were unproductive, while a test pit outside near the entrance produced a number of large nails, two clay pipe stem fragments, a cobble of European ballast flint which appeared to have been flaked, and a number of flakes of ballast flint.

This structure is possibly of European origin, although there is a chance it is Beothuck given the material associated with "Feature I".

Summary

In all, the field season was very productive, though shortened by Fall temperatures.The excavation ended on November 1st and the site was covered by brush which hopefully will discourage the curious.

This site expands our present knowledge and understanding of Beothuck in the historic context. Even though the Beothucks were beginning to acquire European goods at this point, they were able to maintain most of the traditional skills of tool manufacture, where, in later years these skills fell into disuse, were then forgotten and replaced by skills which better exploited European materials (LeBlanc 1973:145-6). It seems likely that the historic component at Frenchmen's Island is a significant link in connecting ethnographic and historic occupants of Wigwam Brook (Ibid) and Indian Point (Devereux 1970) to the late prehistoric occupants of Frenchmen's Island. L'Anse a Flamme (Penney, personal communication), Cape Freels (Austin, personal communication, Carignan 1977) and Bonavista Bay (Ibid). Connecting the ethnographic to the prehistoric in many areas is not easily achieved.

Further field work on Frenchmen's Island is necessary to expand knowledge of both Beothuck periods at this site they relate to other Beothuck sites on the Island of Newfoundland and possibly the Point Revenge Complex (Fitzhugh 1978) of Labrador, the site may also expand our understanding of the Late Dorset component which may be an example of the terminal stages of Palaeo-Eskimo occupation in Newfoundland.

BIBLIOGRAPHY

Carignan, Paul
1979 Prehistoric Cultural Traditions of the Beaches Site DeAk-1, Bonavista Bay. M.A. Thesis on file, Department of Anthropology, Memorial University of Newfoundland, St. John's, Newfoundland.

1977 Beothuck Archaeology in Bonavista Bay. Archaeological Survey of Canada, Mercury Series, Paper No. 69, Ottawa.

Devereux, H.E.
1970 A Preliminary Report on the Indian Point Site, Newfoundland: A Stratified Beothuck Site. On file National Museum of Man, Ottawa.

Fitzhugh, William
1978 Winter Cove 4 and the Point Revenge Occupation of the Central Labrador Coast. Published in Arctic Anthropology. Volume XV, Number 2, 1978.

Howley, J.P.
1915 The Beothucks or Red Indians. The Aboriginal Inhabitants of Newfoundland. Cambridge: University Press.

Hume, I.N.
1970 A Guide to Artifacts of Colonial America, Alfred A. Knopf, 1970, New York.

LeBlanc, Raymond
1973 The Wigwam Brook Site and the Historic Beothuck Indians. M.A. Thesis, on file, Department of Anthropology, Memorial University of Newfoundland, St. John's.

Linnamae, Urve
1975 The Dorset Culture: A Comparative Study in Newfoundland and the Arctic. Technical Papers of the Newfoundland Museum, Number 1, St. John's.

Penney, Gerald
1978 An Archaeological Survey of the North Side of Trinity Bay from Cape Bonavista to the isthmus of Avalon. On file at the Newfoundland Museum, St. John's, Newfoundland.

A PRELIMINARY REPORT ON THE EXCAVATION OF THE L'ANSE à FLAMME SITE (CjAx-1).

Gerald Penney
Memorial University of Newfoundland

Background

During the 1979 field season, while employed by the Conne River Band Council, I investigated a site near Gaultois which had been brought to my attention by local residents. The site had been accidently discovered the previous summer by students collecting sods to cover an OFY sponsored playground in Gaultois. Ellen Penney, Andy Benoit, Walter John, and the author spent two days at the site and recovered almost two hundred stone artifacts from three partially excavated squares. The distinctness and richness of the site warranted further investigation. Funds were provided by the Historic Resources Division of the Nfld. Department of Culture and the Conne River Band Council for a dig in July, 1980. Zelda Cohen, Shaun Austin and James Tillotson provided the field assistance.

The Site

The L'Anse à Flamme site (CjAx-1) is located in the Little Passage which separates Long Island (on which the fishing village of Gaultois is located) from the mainland. This is a narrow passage which provides sheltered, deep water access from Hermitage Bay to Bay d'Espoir. The latter Bay is more akin to an inland waterway than is Hermitage Bay which opens to the Atlantic and can quickly duplicate its winds and waves. The passage is steep sided with cliffs rising vertically from the sea; this is a constant feature along Newfoundland's south coast.

The site is at the bottom of a high range of cliffs (150-200 m) which drop in a finger-like projection to the sea. The site starts about a meter above sea level and continues up the mainly granitic gneiss projection for 35 meters. The grade rises about 7 meters over this distance.

The vegetation is mainly stunted spruce and fir trees which manage to grow despite an apparent absence of soil. Their tenacious struggle for life has produced a nearly impassable barrier to travel. The site had been cleared of trees and was covered with rough saw grasses with scattered irises. There had been a European occupation at the site but it was short and not very intensive, probably in the nature of a fishing shack with a small stage projecting to the sea. Local residents cannot recall ever seeing any structures, but a couple of pylons from the stage cribbing were observed at low tide.

The area is locally referred to as "Stevens Hay Garden" but oral tradition has not preserved further information about this gentleman. There was no indication of plowing or farming; indeed, the lack of soil would discourage any attempt. However, we did find a pony shoe suggesting that such an animal may have grazed there.

The ceramic sample recovered included stoneware, pipe fragments, red earthenware, refined white earthenware, and one polychrome fragment. A good sample of wrought iron nails was also recovered as was some dark green and clear bottle glass and a few sherds of clear tableware glass. The application of Binford's straight-line regression formula on pipe stem hole diameters produced a date of 1855.

Three prehistoric components have been identified at L'Anse a Flamme:

Maritime Archaic, Paleo-Eskimo and Beothuck. These habitations are assumed to represent a considerable time span covering the last millennium B.C. and the first millennium A.D.

Maritime Archaic

The Archaic component of the site came as a surprise. Testing at the site the previous summer failed to unearth diagnostic Archaic tools as did an intensive survey within Bay d'Espoir. This is the first reported occupation of the south coast of Newfoundland by the Maritime Archaic peoples. (It had previously been assumed that a sinking coastline had drowned such sites.)

The definition and cultural delineation of the Maritime Archaic tradition has been an ongoing project of James A. Tuck since 1968. At that time an archaic cemetery was excavated at Port au Choix which provided the initial archaeological evidence for the identification of this tradition (Tuck 1971). Tuck has assigned a "whole" cultural tradition to the Maritime Archaic people. Their physical distribution was all along the coastal Northeast reaching as far as northern Labrador following Paleo-Indian occupation. The uniformity of tool kits, maritime subsistence orientations and burial traditions has been demonstrated by numerous researchers in the region (Harp 1964, Fitzhugh 1972, 1977; Carignan 1974, 1977).

The sample recovered from L'Anse a Flamme is small (see plate I) but its presence is significant. Twenty-eight artifacts from the Archaic occupation have been catalogued.

hammerstones	2	adzes	2
abraders	4	large side scrapers	9
large retouched flakes	2	bifaces	3
preforms	3	ground slate	3

Paleo Eskimo

L'Anse à Flamme was the site of fairly intensive Dorset occupations. Over 50% of the nearly 1400 artifacts recovered at the site are Dorset. Three separate and identifiable occupations have been observed.

Two Dorset sites which flank the L'Anse a Flamme site were investigated last summer (Penny n.d.a.).[1] Charcoal samples were obtained at the Eagle Head site (CjAx-2) in Hermitage Bay and the Isle Galet site (CkAx-1) in the Bay d'Espoir. The radiocarbon determination for Eagle Head (Teledyne Isotopes, 1-11, 075) was 1600±85 B.P. and 1345±115 B.P. for Isle Galet (1, 11, 076). Both these dates are within the accepted time reference for Dorset occupation in Newfoundland. Because the south coast has not been archaeologically surveyed there is a dearth of comparable dates.

The Cape Ray Light site, located approximately two hundred and fifty kilometers to the west of L'Anse a Flamme was excavated in 1967-68 by Urve Linnamae. The maximum spread of occupation at that site was 1400 years, from 700 B.C. to A.D. 770 she dismissed the radiocarbon evidence for such a spread:

> "the artifact analysis does not point to such an early complex nor is there enough variation in types of raw material to support a long term occupation."
> (Linnamae 1975:48)

After a comparison with Harp's material from Port au Choix and with his radiocarbon determinations she accepted a date "somewhere within the

[1]During 1980 two additional Dorset sites were located;-Furbey's Cove (CjAx-3) and Piccaire 1 (CjAx-5). Further investigation in the Burgeo-Ramea region located Dorset sites at Brimball Storehouse Cove 1 (CjBh-3), Bay de Vieux 1 & 11 (CjBg-1 & CjBh-1) and Island Cove (CjBh-2).

minimum range, or very broadly in the first half of the first millenium A.D." (ibid:48)

An early Dorset component has been identified at L'Anse a Flamme. The collection is small, comprising less than a dozen artifacts, and is represented by the bottom row on plate II. A tiny burin-like tool (the only one found), high side-notched end blades that have not been tip fluted and notched uniface points round out the collection. The term "early" Dorset is used loosely and is site specific.

Two distinct middle Dorset occupations have also been isolated. One comprises about 100 lithic tools which have become patinated because of raw material selection. The tool kit consists of tip-fluted end blades with basal grinding; lancolate bifaces; microblades and scrapers. Some of the 65 quartz crystal microblades and eight quartz crystal microblade cores may also be associated with this component. The hardness of quartz crystal inhibits the patination process.

The larger middle Dorset component is represented by bright, colourful cherts the origins of which are unknown. The tool kit is the same as described above. The total absence of soapstone at the site is a noted feature.

A surprising find at the site was the excavation of a rim sherd by James Tillotson. The sherd was excavated 35cm below the sod zone in a deep, stratified area of the site. It overlaid ground slates and other Dorset material. James Tuck identified the sherd (see plate III) as Point Peninsula and Dr. J.V. Wright of the National Museum confirmed his identification:

> "it is decorated with a sloppy form of dentate stamp that approaches a pseudo scallop shell impression even though it superficially looks

> like cord-wrapped stick. The incipient collar and the exterior chevron motif would put it somewhat late in the earlier portion of the Point Peninsula cultural sequence and I would ballpark an age estimate of A.D. 500"
> (J.V. Wright personal communication 23 Sept./80)

W.J. Wintemberg found a sherd at the Anse au Dune in southern Labrador in the 1930s, and Tuck and McGhee found sherds on Dorset sites in Pinware in the 1970s. The presence of this sherd at L'Anse a Flamme conjures all sorts of theories, but realistically all we can say is that we found one small piece of a rather large pot.

Beothuck

The Indian component at the site proved to be the most exciting. While at the site last summer we uncovered a number of lithic artifacts which were radically different from other cultural material located in Bay d'Espoir. When these artifacts (small corner-notched, expanding base projectile points; see plate IV) were first unearthed the writer, was unable to assign a cultural affiliation to them based on current knowledge of Newfoundland prehistory. The first reaction was to accept these projectile points as being Beothuck. Upon examination this line of thought really means that it is possible to archaeologically define Beothuck by a default system; cultural material that is not Maritime Archaic, Dorset, Thule or Micmac must be Beothuck!

Presently the Beothucks are recognized ethnographically and linguistically in Newfoundland, but the archaeological identification of this culture is in its infancy. The Beothuck occupation is assumed to have spanned the prehistoric and historic, the last known Beothuck having died in 1829. The time depth of their prehistoric occupation is lengthy if we accept the in situ development theory of Maritime

Archaic into Beothuck as proposed by Tuck (1971, 1976).

To circumvent the archaeological ethnic problem I chose to include the above artifacts from L'Anse a Flamme and the small intrusive component at the Isle Galet site as a complex of traits designated as the Little Passage Complex (Penney n.d.b.). The idea of a "complex" was borrowed from Willey and Phillips (who use the more frequent term "phase") who saw such a term as being free to be used

> "for the many instances in which we simply do not know what goes before or after, or for those less frequent occasions when a new phase (complex) appears an intrusion without apparent relationship to any precedent continuity."
> (Willey and Phillips 1958:23)

Since the time of those initial thoughts developments have occurred which seem to support the initial designation of the cultural material as Beothuck. This includes the radiocarbon date of 1130± 80 (1-11, 077 Teledyne Isotyopes), new data from the Frenchmans Island site (Evans: personal communication: 09/80) and the viewing of Mr. D. Locke's Beothuck collections from central Newfoundland and Notre Dame Bay.

A forthcoming thesis will contain a more detailed account of this component. The origin, distribution and external relationships of this culture will be extensively examined at that time.

Bibliography

Carignan, Paul

1979 Prehistoric Cultural Traditions at the Beaches Site Deak-1, Bonavista Bay. M.A. thesis on file, Department of Anthropology, Memorial University of Newfoundland, St. John's.

1977 Beothuck Archaeology in Bonavista Bay. Archaeological Survey of Canada, Mercury Series, Paper No. 69, Ottawa.

Fitzhugh, William W.

1972 Environmental Archaeology and Cultural Systems in Hamilton Inlet, Labrador. Smithsonian Contributions to Anthropology, No. 14, Washington, D.C.

1977 "Indian and Eskimo/Inuit Settlement History in Labrador: An Archaeological View," in Our Footprints are Everywhere. Nain, Labrador Inuit Association, pp. 1-40

Harp, Elmer Jr.

1964 "Evidence of Boreal Archaic Culture in southern Labrador and Newfoundland" Contributions to Anthropology 1961-62 Part I, 184-261, National Museum of Canada, Bulletin No. 193.

Linnamae, Urve

1975 The Dorset Culture: A Comparative Study in Newfoundland and the Arctic. Technical Papers of the Newfoundland Museum, Number 1, St. John's.

Madden, Marcie M.

1976 A Late Archaic Sequence in Southern Labrador. M.A. thesis, on file, Department of Anthropology, Memorial University of Newfoundland, St. John's.

Penney, Gerald

n.d.a. A report of an archaeological survey in Bay d'Espoir. On file, Newfoundland Museum.

n.d.b. A proposal for the excavation of the L'Anse a Flamme site. On file, Newfoundland Museum.

Tuck, James A.

1971 "An Archaic Cemetery at Port au Choix" American Antiquity 36(3): 343-358.

1976 Newfoundland and Labrador Prehistory. National Museum of Man, Ottawa.

Renouf, Priscilla

1974 A Late Palaeo-Indian/Early Archaic Sequence in the Strait of Belle Isle. M.A. thesis, on file, Department of Anthropology, Memorial University of Newfoundland, St. John's.

PLATE I

Maritime Archaic Artifacts

a. projectile point

b. side scraper

c. lanceolate biface

d. side scraper

e. adz

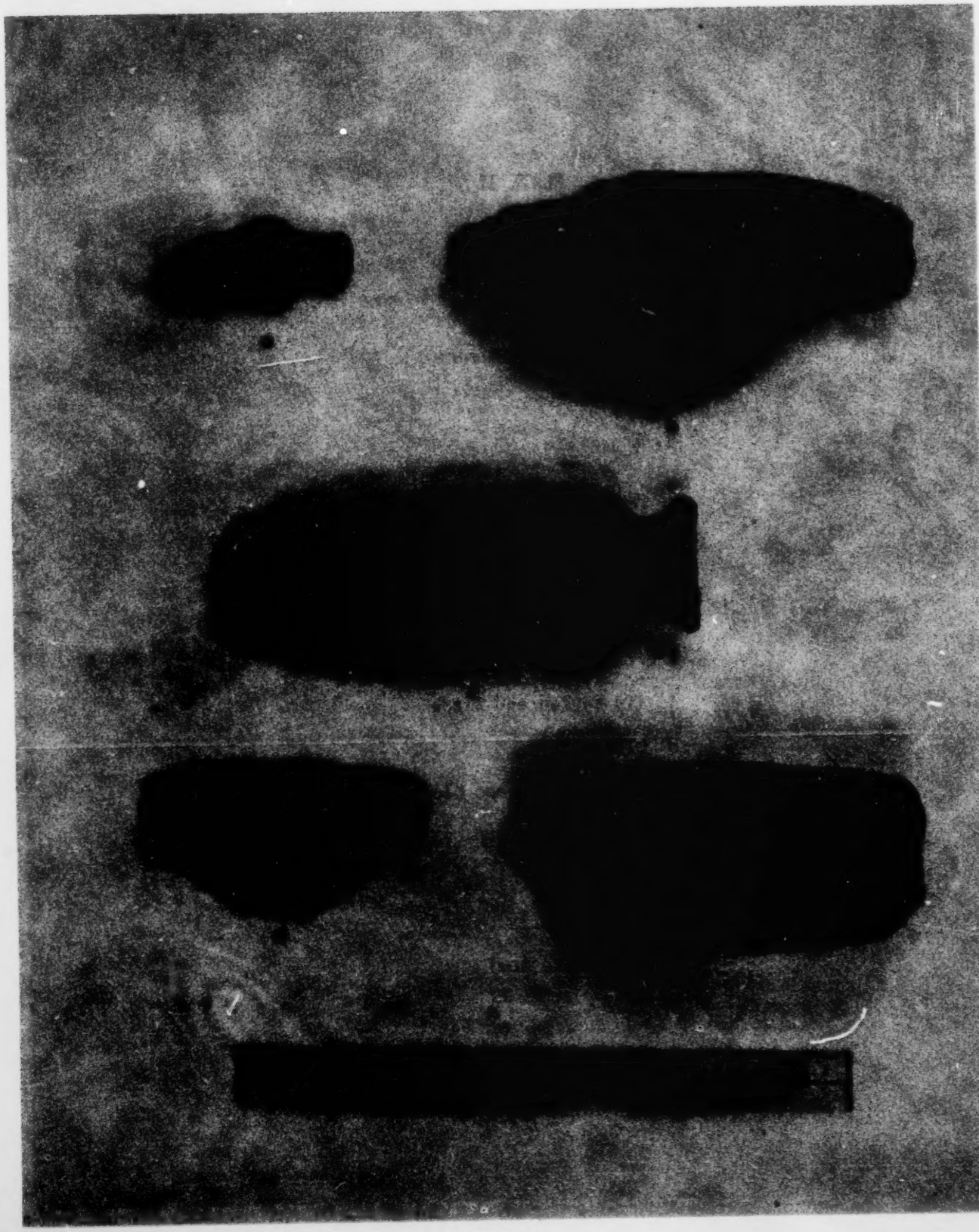


PLATE II

Dorset Culture

a. adz fragment

b. expended blade core

c. spokeshave

d. end blade

e. ground slate harpoon head

f. thumb nail scraper

g. scraper with graving spur

h. end blade

i ground slate lance

j. tip-fluted end blade

k. blade

l. side-notched end blade

m. ground slate lance

n. assymetric knife

o. blade

p. burin-like tool

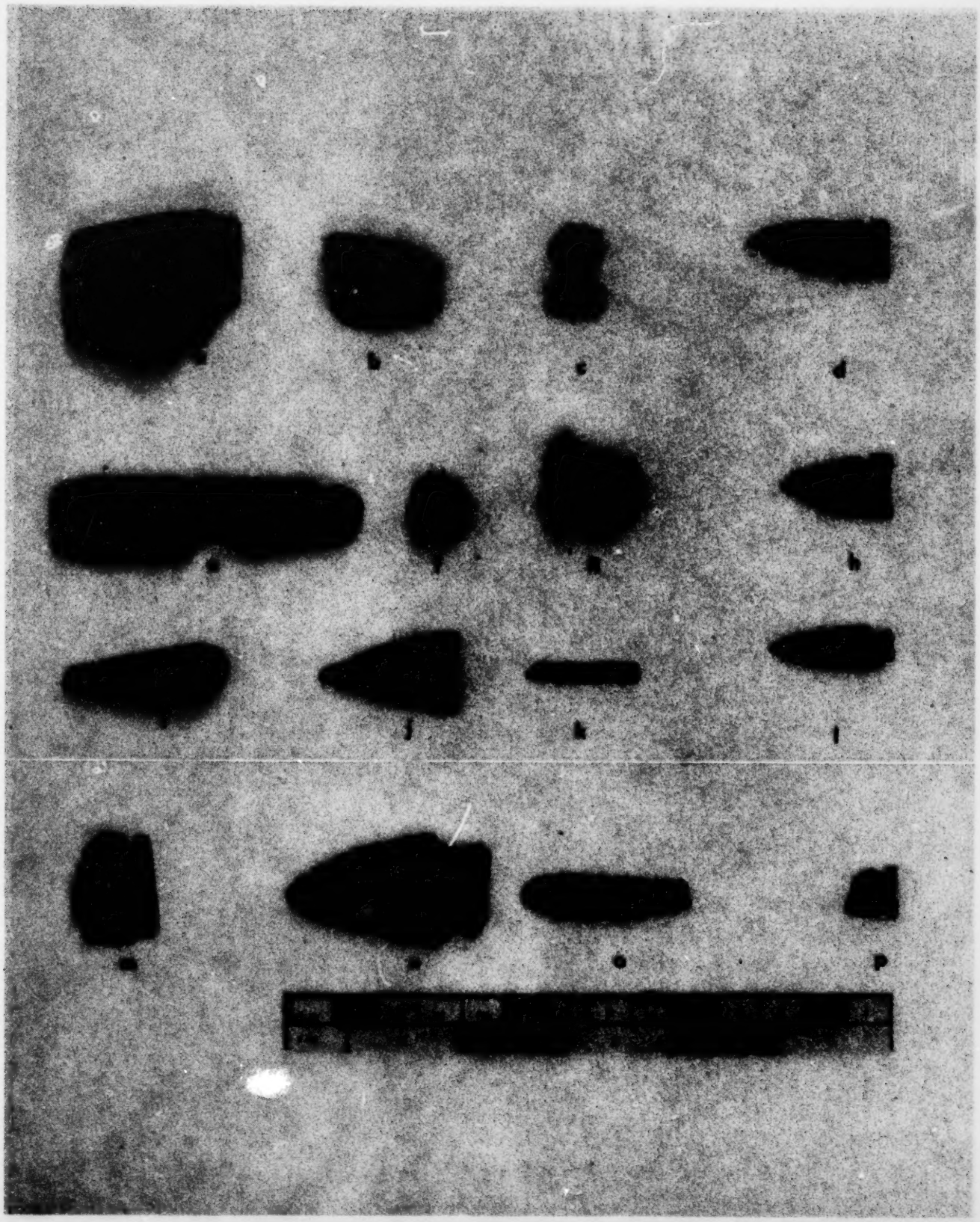


PLATE III

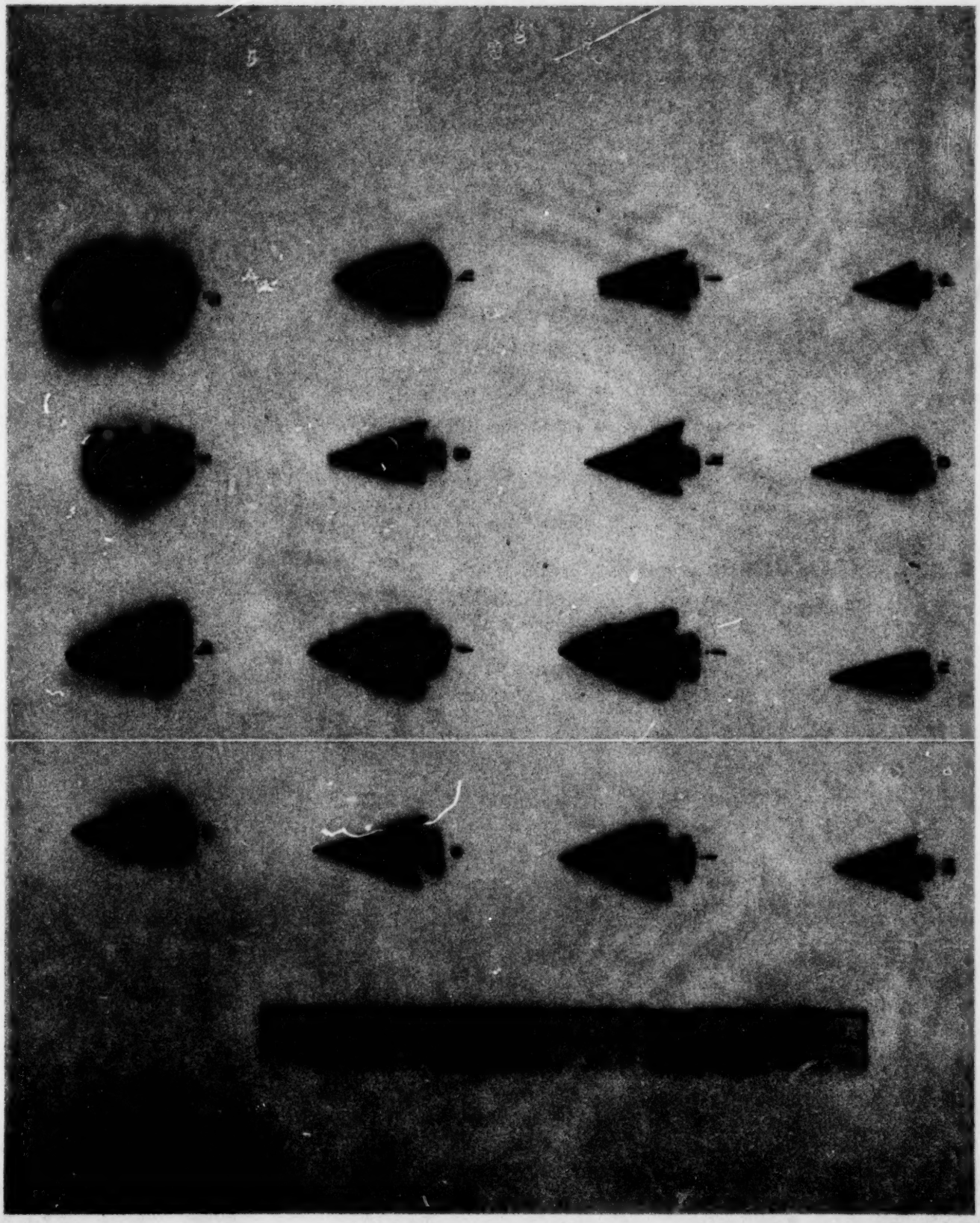
John Martin, photo

Point Peninsula rim sherd

PLATE IV

Beothuck Culture

a, b, h - endblades

c, d - scrapers

e-g, i-p - projectile points